So, let’s talk about programming!
Motivation
Eight ways to motivate students
Use open problems.

Allow students to take control.

Creativity.
Projects of discovery

Surprises are good.

Experiment.
Ants
Do something that actually requires a computer!

Projects of discovery

Surprises

Experiment
Connect to their interests

What are their interests?

Let them choose
Real world connections
Real world connections

- Pollution
- Health / fitness
- Global warming
- Traffic simulations
- Social interactions

...
Use real data
Multi-level learning
Wave
Gadgets are cool
But how? Stride.
How do we make this happen?
How do we make this happen?

- Teachers.
- Ambitious curriculum.
- Tools.
- Guidance (tools, pedagogy).
- Support (political, financial).
- Education research.
A case study: CAS

COMPUTING AT SCHOOL
EDUCATE · ENGAGE · ENCOURAGE
Enthusiastic volunteers

Work with academia, government, industry

Act locally: grassroots, hubs.

At all levels of school.
Connect
Collaborate
Act locally
Collaborate internationally on research
Thank you.