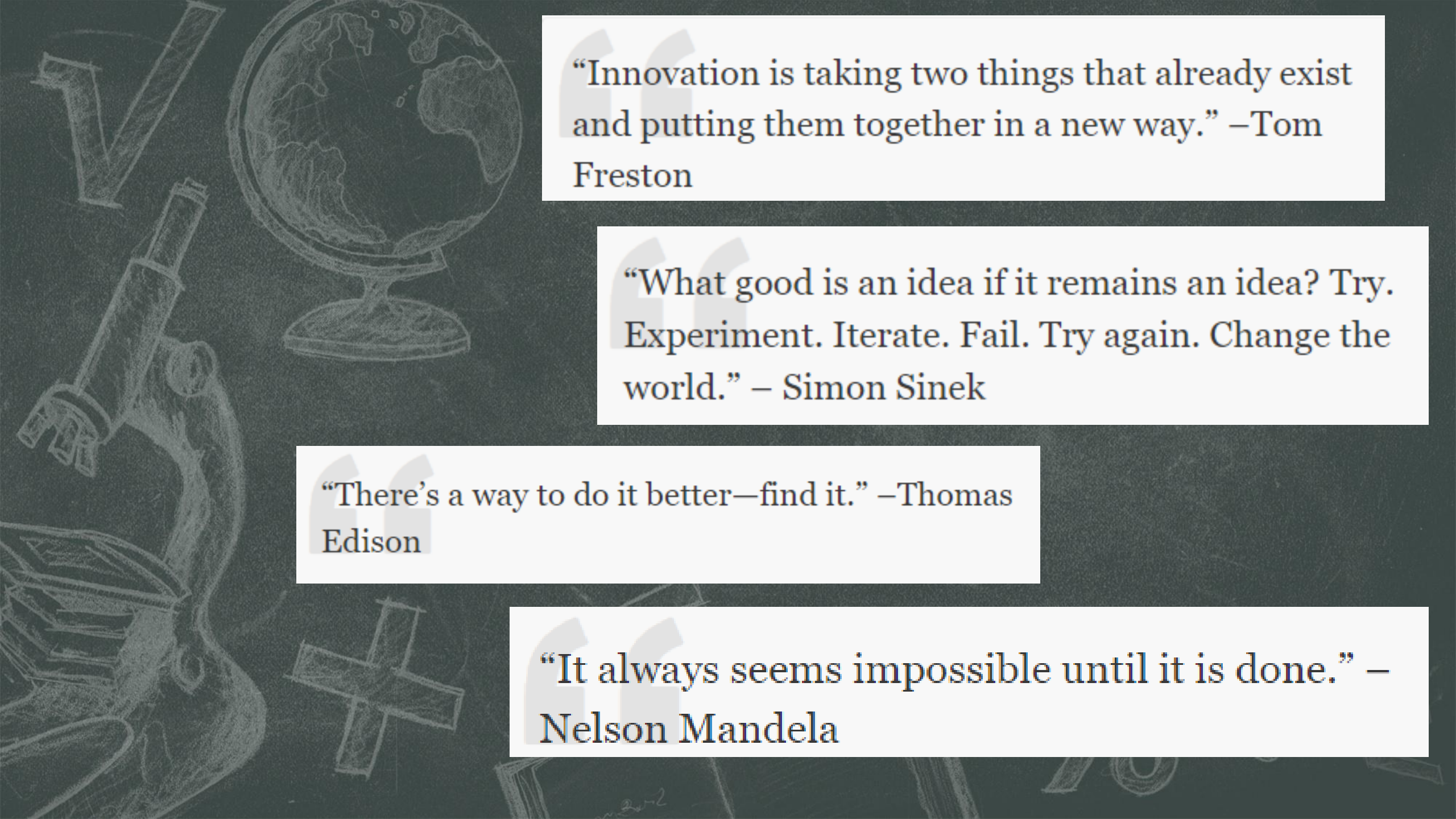
Innovation and its role in education and potential impact on students' future

Daljit Kaur



"Innovation is taking two things that already exist and putting them together in a new way." –Tom Freston

"What good is an idea if it remains an idea? Try. Experiment. Iterate. Fail. Try again. Change the world." – Simon Sinek

"There's a way to do it better—find it." –Thomas Edison

"It always seems impossible until it is done." – Nelson Mandela

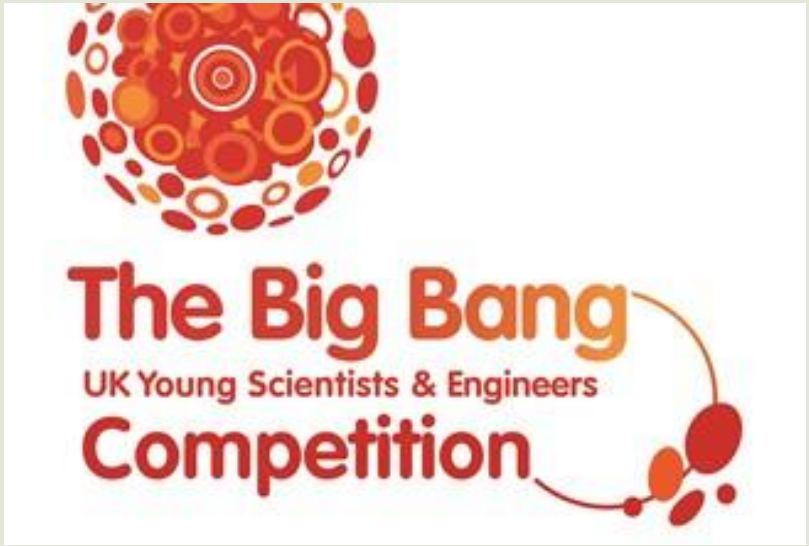
“Necessity is the mother of invention….”

“Technology in schools will no longer be micromanaged by Whitehall,” Gove said back in 2012. “By withdrawing the current ICT programme of study, we’re giving teachers freedom over what and how to teach.”

Tech competitions & STEM

TEENTECH®

LEADERS AWARD



YOUTH STEMM AWARD

Educator to facilitator ‘The creative/tinker space’

Hardware

- Raspberry Pi
- Arduino
- BBC Microbits
- Lego Mindstorms
- Drawing tablets
- VR
- 360 Camera
- Drones

Software

- Languages
- Unity
- Video editing
- App Making
- Gaming
- Graphics

Literature

- Hello World
- BBC Focus
- Science Magazines
- Flyers/brochures
- Books

Infographics

- posters
- signage
- Display boards

VLE landing page …..

STEM Schemes

- CREST Awards
- IRIS
- RS Education Network
- STEM Awards
- Competitions

Videos

- YouTube
- BBC Click
- TedX talks

Links

- EPQ
- Nuffield
- Digital Explorer
- Digital Health & Science

Misc.

- Biographies
- Articles to inspire
- Newspaper cuttings
- Engineering materials

STEM Sunday

STEM Projects @ Loughborough Schools Foundation

Step 1
Desire

- Who's or what is driving the student?
- (Autumn)

Step 2
Explore

- What areas do they enjoy?
- Future aspirations?
- (Autumn)

Step 3 **The problem**

- An affiliation?
- Knowledge?
- (Autumn)

Step 4 **A solution**

- Experts
- Sources of data and support
- (Spring)

Step 5
Submission

- CREST award
- TeenTech
- Big Bang
- More ….
- (Spring)

Some success …..

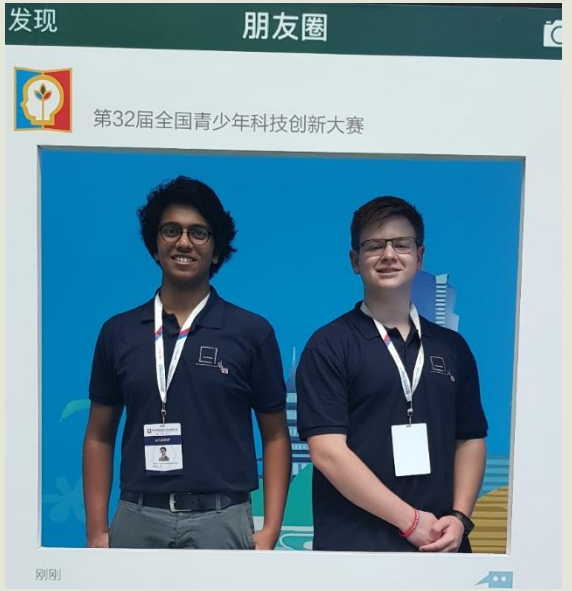
@ LSF

How is success measured?

- Affect on **academic studies**
  - Numeracy; literacy; science; ICT
- **Soft skills**
  - Communication; public speaking; presentation; confidence; growth mind set
- **Project success**
  - Some recognition in the form of an award i.e. CREST Award
- **Future impact**
  - Internships; placements; university choices

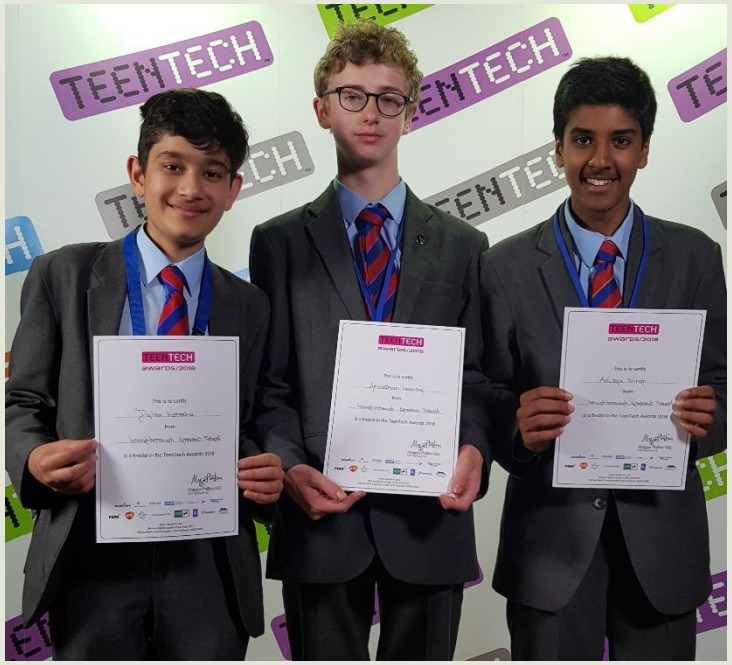
Project E.A.G.L.E.

Project Medivest



epilepsy research uk

The Royal Society of Medicine

STEM AMBASSADORS

The formula continues to bring success