BUILDING BRIDGES

Understanding infrequent and absent visitors

Beth Hawkins
Science Museum, London
15th November 2017

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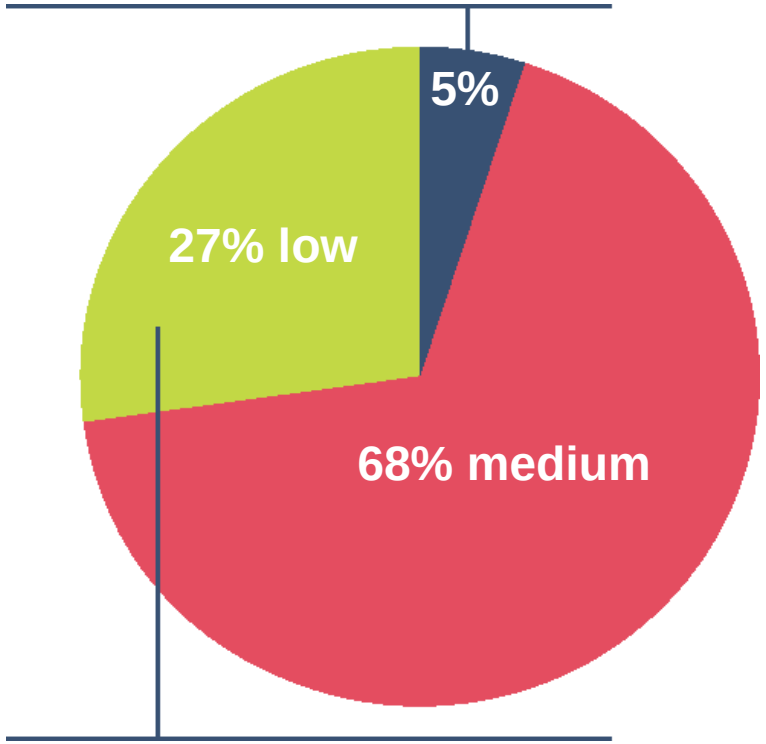
Science engagement in the UK

5% have high science capital *(actively engaged)*
More likely to be male and socially advantaged



27% have low science capital *(science is not for me)*
More likely to be female and socially disadvantaged

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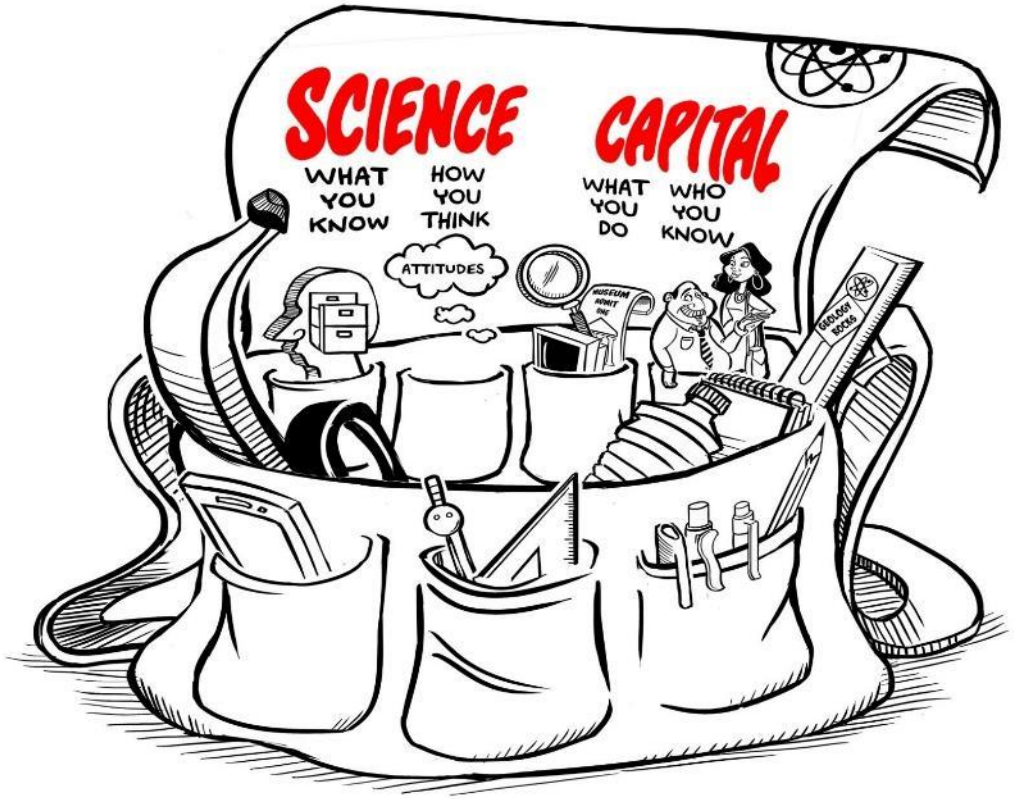
Your science capital…



- **What you know** about science/ STEM
- **What you do** – different science related activities
- **Who you know** who use and talk about science
- **How you think** about science

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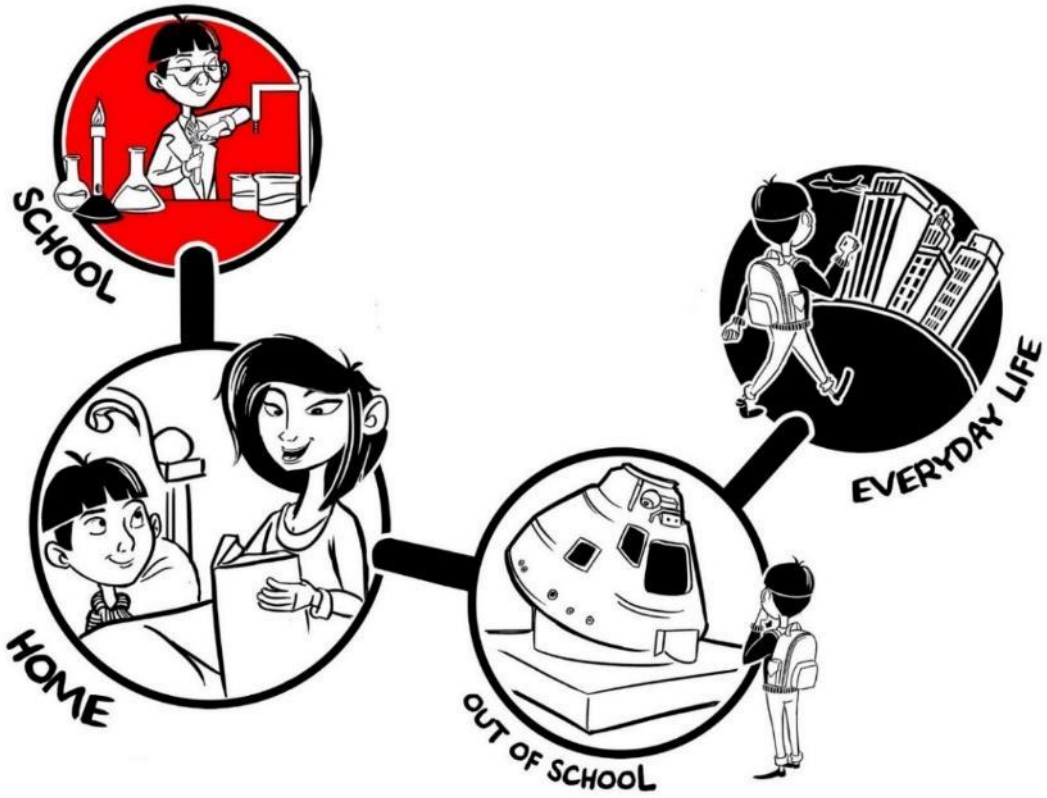
The Building Bridges project

- Link school, the Science Museum, and every-day family science experiences
- Ran from 2012 - 2017
- 11-12 year olds
- 18 schools each year
- Focus on science skills
- Set of different experiences across a year



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Project programme

Teacher Course

December - January

Outreach Visit:
Science show & workshops

January – March

March - April

Museum Visit:
Inc. scientist led workshops

April - May

May - June

VIP Family Event

June - July

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Research questions

- How might families' cultural references and values, including their interests and aspirations, affect their engagement with science?
- How do families' everyday conversations, activities and skills relate to science content, process and/or practice?
- What is the impact of families' involvement in the 'Building Bridges' project on their views, conversations and activities related to science?

Key findings…

- See science as something that only happens in school or in a laboratory
- Science Museum was viewed as ‘educational’ rather than also fun
- Have different language and points of reference to us & frequent visitors e.g. *‘statues’, ‘interactives’.*

Key findings…

- Families are a very influential part of students lives.
- Technology and connectivity is an extensive part of children's lives - from which parents are often excluded.
- Shared interests in food, shopping, music, sport and gardening.

A whole museum approach…

Every moment in the museum is an opportunity to feel welcome in our spaces and to shape our visitors' attitudes towards STEM.

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Language (verbal and visual)

How can the communication methods and language we use help everyone to feel that they can do and be part of science?

'…do I feel that science is something I am part of?'

Science content knowledge

How can we value and build on peoples existing STEM knowledge and experiences and broaden people's ideas around what science is?

'…do I understand this science?'

Skills

How can we help visitors recognise that they have science skills and use them in all areas of their life?

'…what skills do I already have and use?'

Use everyday examples

How can we link our STEM experiences to our visitors' rich and diverse interests, experiences and everyday lives?

'…what does science look like when I bump into?'

People

How can we show that science isn't just for scientists and that there are diverse people who work in or benefit from science?

'…are there people I relate to represented?'

Confidence and ownership

How can we make people of all ages and backgrounds feel welcome and confident to take part in our experiences and feel that our museums are a place for them?

'…is this a place for me, can I get involved?'

Promote science talk

How can we invite and encourage visitors to talk and share their own stories and opinions about science?

'…what might we talk about?'

Extend the experience

How can we extend our experiences in and beyond our museums?

'…how can I continue this experience or find out more?'

Positive reinforcement

How can we help our visitors feel that science is something they can do?

'***…is science something that people believe I can do well?'***

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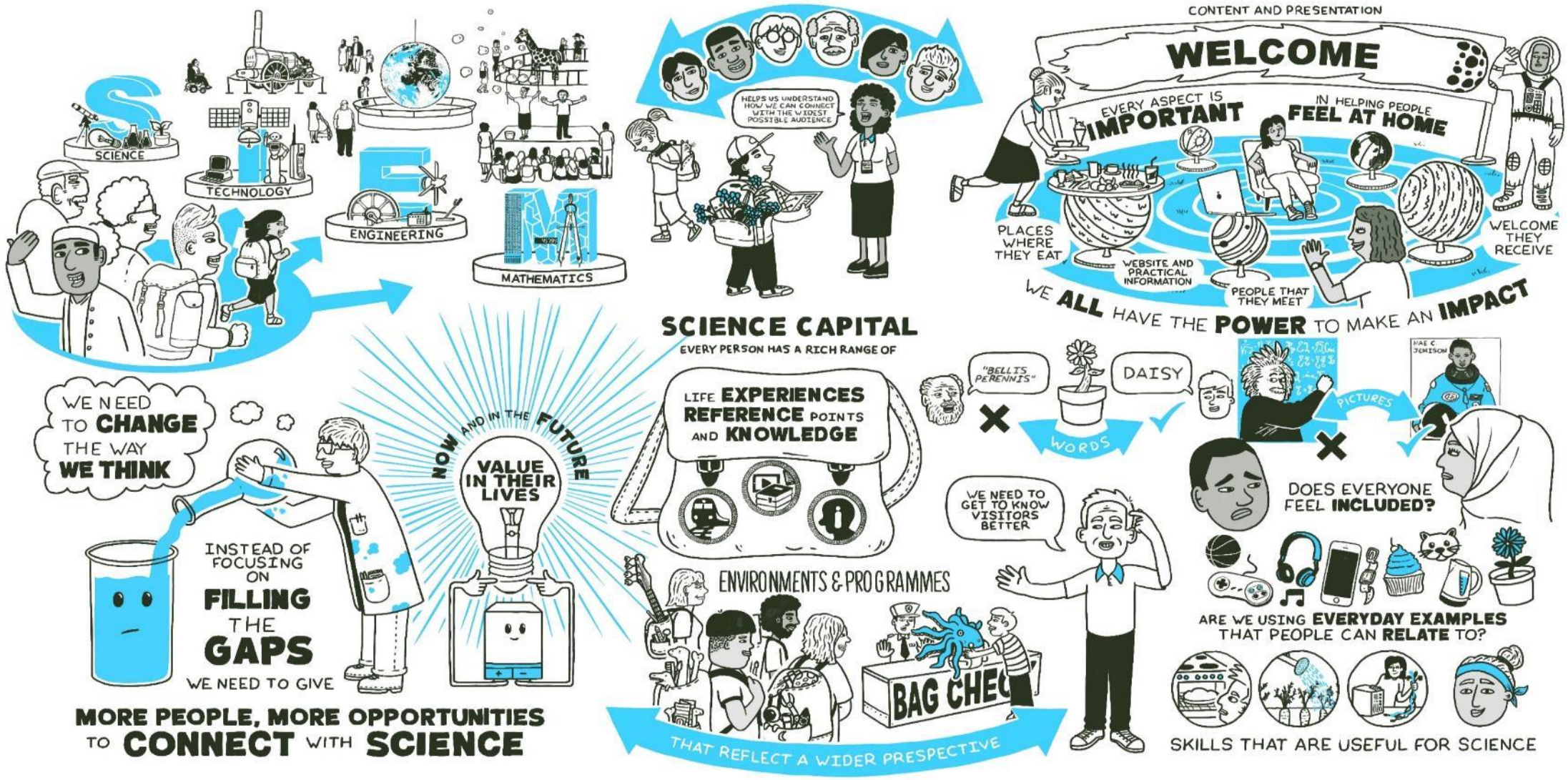

Science capital and the informal science sector

bit.ly/scicapinformalscience