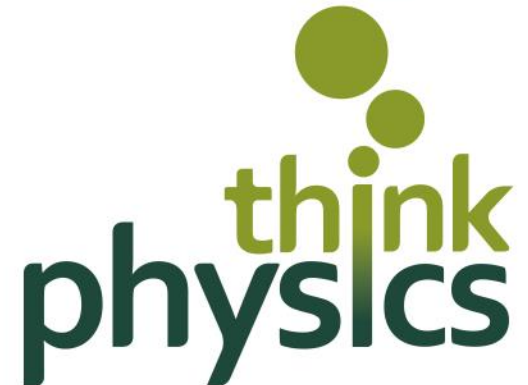




Think Physics: Science Capital in the Classroom

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Outcomes

- participants will understand the concept of science capital and will have the opportunity to think about their own 'science capital'
- participants will consider the importance of careers awareness in primary schools
- participants will examine some resources to introduce 'careers in the classroom'.

Quick Quiz

What science-related qualifications or skills / knowledge do you have?

- e.g. 'A-level in Biology', 'read lots about planets'

What science related activities / experiences do you do outside of work/study?

- e.g. visit science centres

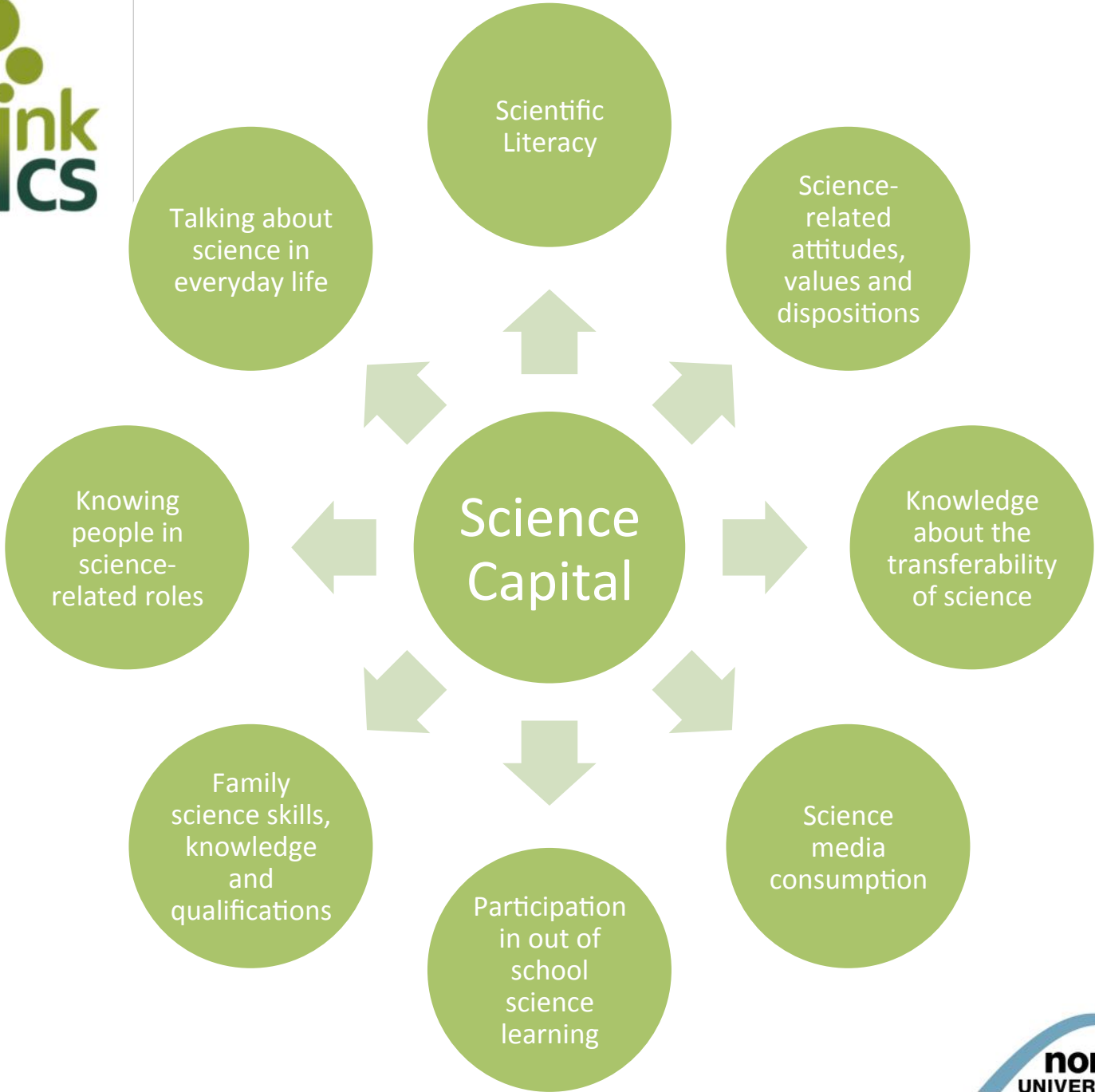
Who do you know that uses science in their work?

- e.g. 'my cousin is an engineer/car mechanic'

What three words would you use to describe your feelings about science?

What is science capital?

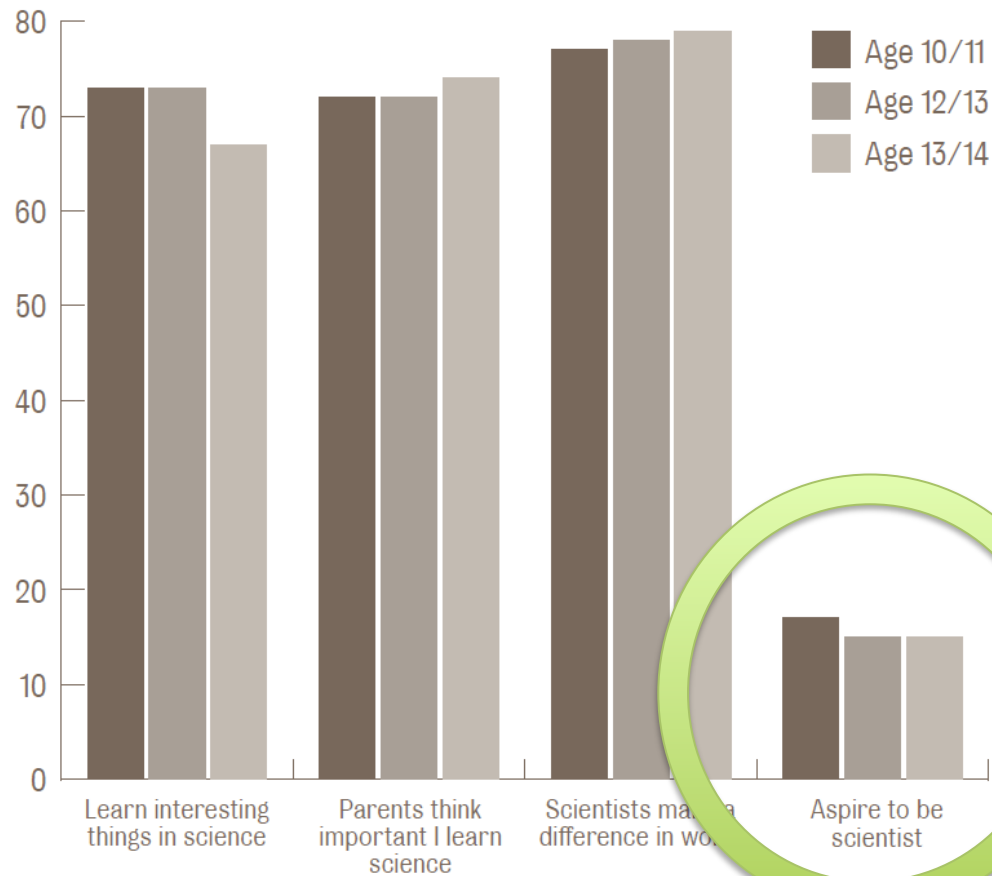
- ASPIRES – longitudinal study looking at STEM career aspirations, attitudes and choices of pupils aged 10 - 14
- Found a link between ‘science capital’ and students aspirations for future science careers
- Family background and interests made a difference in what pupils wanted to do





Young People like science...

COMPARISON OF SURVEY RESPONSES FROM
YEAR 6, YEAR 8 AND YEAR 9 STUDENTS
(% STRONGLY/AGREEING)




Where should the solution start?

2014 – Your Life campaign launched.

- One of it's targets is: Increase the number of students studying maths and physics at A-level by 50% within 3 years

2014 – Think Physics Project launched.

- One of our targets is to increase the number of students studying physics at A-level in partner schools.



The best time to plant a tree was 20 years ago.

The next best time to plant a tree is now.

Chinese proverb



You can't be what you can't see

What jobs might need a
knowledge of science?

Your
pupils
ideas?

Your
ideas?

Think Physics' Approach

- Sinking and Floating (year 1)
- Plants (year 1 or 2)
- Rocks (year 3)
- Levers and mechanisms (year 5 or 6)



Think Physics' Approach

- The Naval Architect (Goat on a Boat) (year 1)
- The Botanist (year 1 or 2)
- The Volcanologist AND The Geologist (year 3)
- The Mechanical Engineer (year 5 or 6)





Where can I find out about different jobs?

[Plotr](#)

[iCould](#)

[NHS Careers](#)

[STEM library](#)

[National Careers Service](#)



Linking careers to curriculum...

Animals, including humans

Materials

Light

States of Matter

- Physiotherapist
- Audiologist
- Biomedical Engineer
- Furniture designer
- Meteorologist
- Optician
- Civil engineer
- Set designer
- Chef
- Pharmacist
- Materials scientist
- Engine designer
- Photographer
- Dental technologist

Supporting Science Capital and Careers

Explain how a particular area of STEM is **relevant** to **real life**.

Talk about **chemists, biologists, etc.**, rather than scientists.

Provide opportunities to **explore STEM outside** the classroom.

Bring STEM workers **into the classroom** (including parents)

Engage parents with collaborative homework.

Highlight the different careers that are related to the subject matter you are teaching.

Present STEM as **normal**, not hard.

Next steps...

Following on from this session,

- What are the key points you will share with your colleagues?
- What will you do in your classroom / school:
 - Next week?
 - Next term?
 - Longer term?



Get in touch

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