AUDIENCE ENGAGEMENT

Royal Society Summer Exhibition

SCIENCE MUSEUM GROUP

OUR LEARNING APPROACH

To **ignite curiosity** around science, engineering, technology and maths.

By **assisting discovery** through **active participation** and **social interaction.**

OVERVIEW OF THE DAY

- What do your audiences need?
- Key messages and learning outcomes
- Engagement framework: hook, inform, enable, extend
- Visitor interactions
- Scenarios and sticky moments
- Putting it all into practice

COMMUNICATION

WHAT AUDIENCES SAY…

WHO ARE YOUR AUDIENCES?

YOUNGER CHILDREN

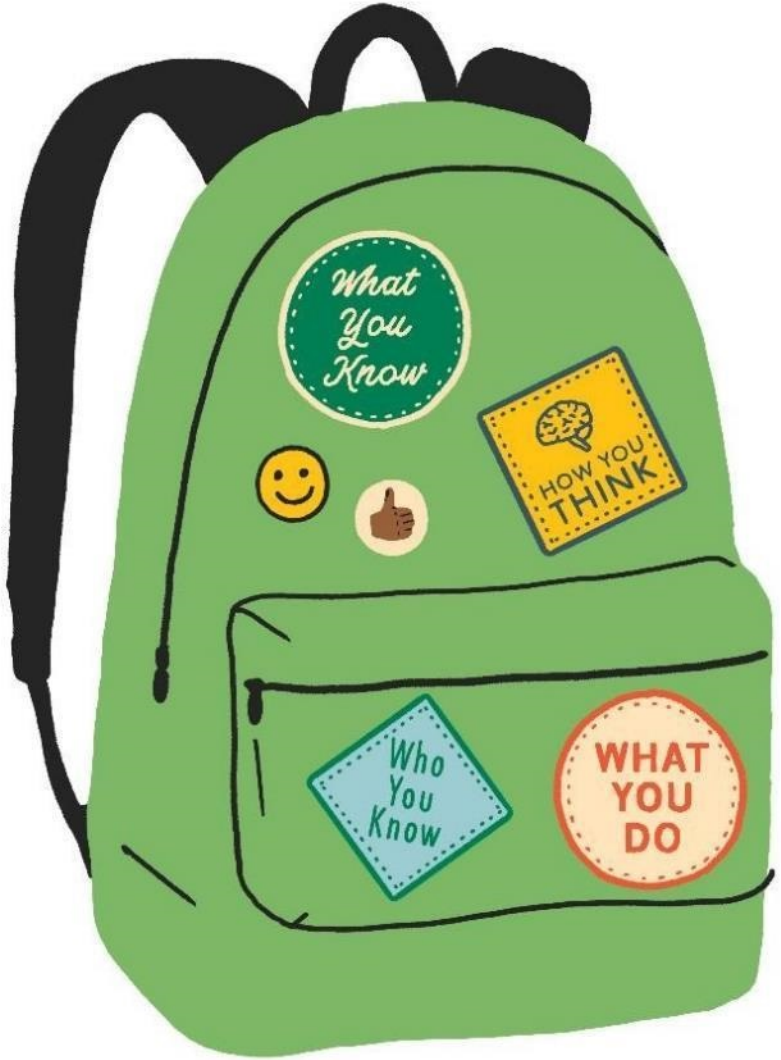
Think of a few questions or a demonstration that you could use to engage children under 8 years old

SCIENCE CAPITAL RESEARCH

Gives us an insight into **why** and **how** some students participate in and engage with STEM related experiences

….and why some do not

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

REFLECTION POINTS

LANGUAGE

Use visual and verbal language that helps everyone to feel that they can do and be part of STEM.

PROMOTE 'SCIENCE' TALK

Encourage people to talk about the experiences they have had with you and about STEM in their lives.

EVERYDAY EXAMPLES

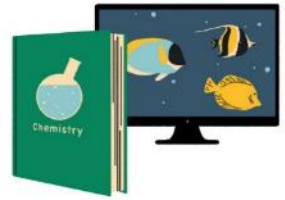
Link STEM content to people's rich and diverse interests and experiences.

CONFIDENCE AND OWNERSHIP

Help everybody to feel welcome and confident to take part in your experiences.

EXTEND THE EXPERIENCE

Provide ways to help people to continue making STEM connections after your experience.



SCIENCE KNOWLEDGE

Value and build on people's existing STEM knowledge and experience.

SKILLS

Help people to recognise that they have and use a wide range of STEM skills.

PEOPLE

Broaden the perception of who does and uses STEM in their work and in everyday life.

POSITIVE REINFORCEMENT

Help people to feel that STEM is something they can do.

WHAT TO COMMUNICATE?

KEY MESSAGES & LEARNING OUTCOMES

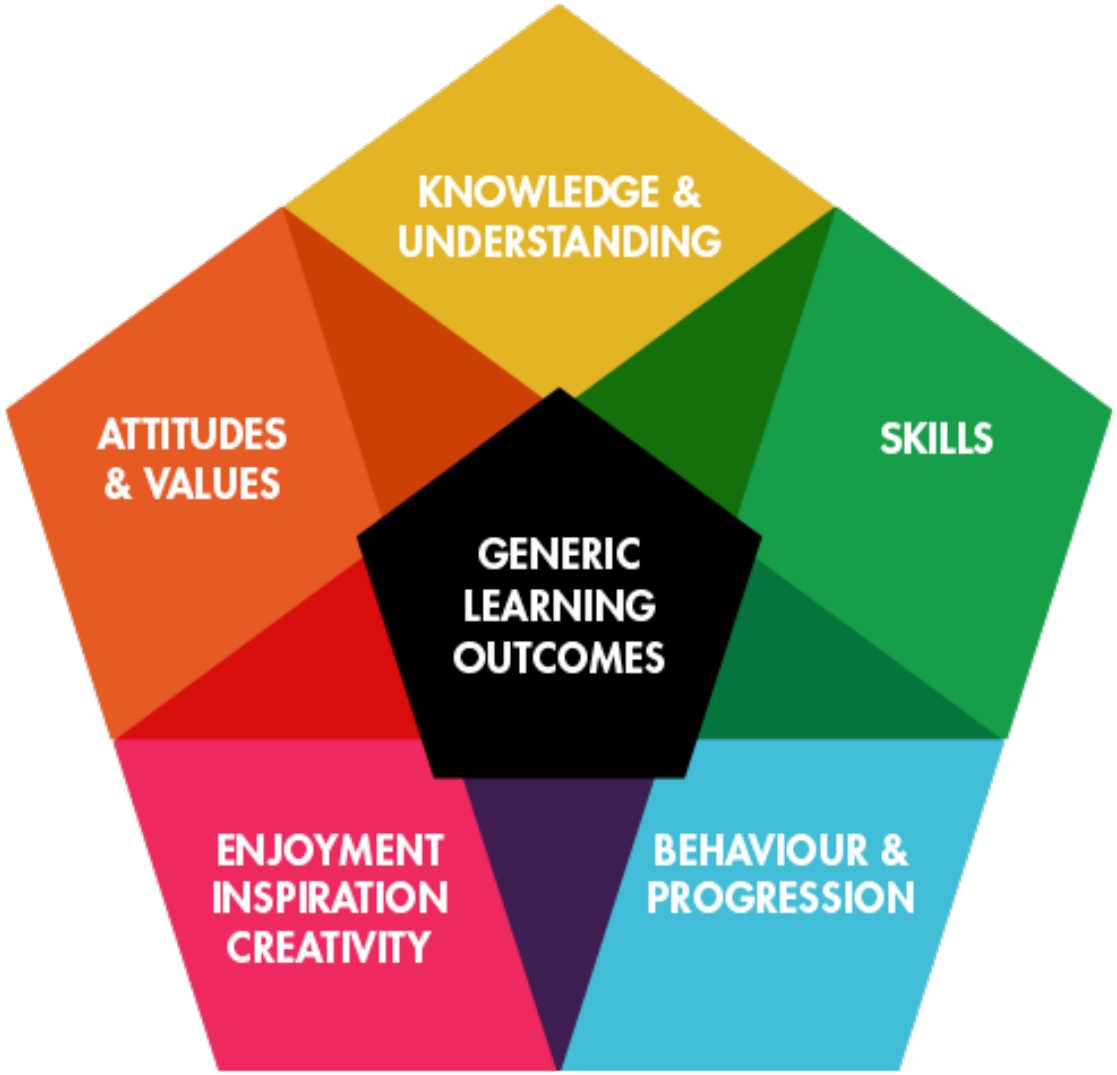
Key messages

The concept or idea that you want to communicate

Learning outcomes

What you want your visitors to take from the experience with you

TYPES OF LEARNING



LEARNING OUTCOMES
FUTURE ENGINEERS

Visitors will…

See the relevance of engineering to both the railways and their lives (knowledge)

Recognise that they use engineering skills like curiosity, creative problem solving and teamwork (skills)

Have a positive perception of people who use engineering and science in their work (attitudes)

LEARNING OUTCOMES

LIFE: A HEALTHY GAME OF CHANCE AND CHOICE

Visitors will…

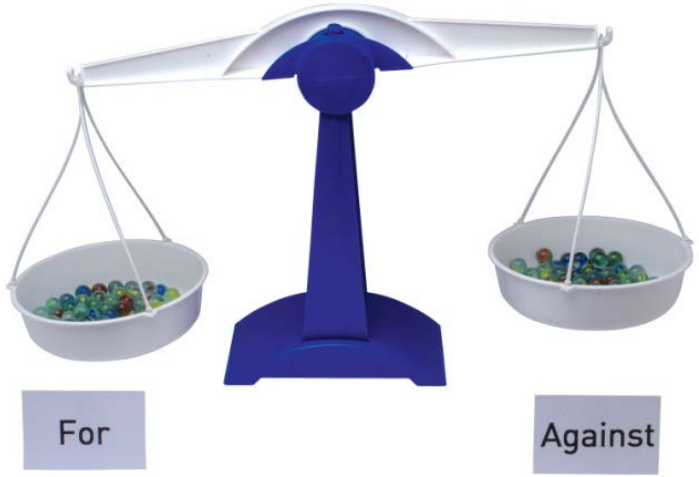
Understand that health is a combination of chance, choice and risk (knowledge)

Realise the diverse work of the Medical Research council is relevant to my life (attitudes/values)

Medical research can help me make informed life choices (attitudes)

EVALUATING OUTCOMES
MEASURING SUCCESS

- Observations
- Capturing feedback
- Voting

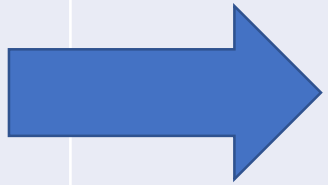


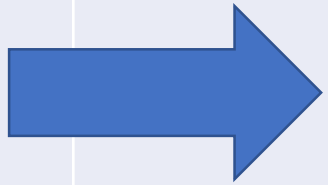
WHAT DO YOU WANT PEOPLE TO DO, FEEL OR UNDERSTAND?

Write up to three learning outcomes for your stand

USING LEARNING OUTCOMES

Learning outcome	Activity content	What would success look like?
What do you want your audience to do, feel or understand as a result of your event?	What have you included in your event to deliver your learning outcome?	What questions would you ask to find out? What would expect people to say, or see people doing if your outcomes had been achieved?





ENGAGEMENT FRAMEWORK

Hook Capture their attention or interest	**Inform** Provide content
Enable Do something active with the content	**Extend** Continue the experience beyond the activity

HOOK

- Personal/ relevant/ local
- Surprising
- Provocative

POWERFUL QUESTIONS & STATEMENTS

- Do men pollute more than women?
- Batman vs. Superman: who is most conductive?
- Could your lip balm kill you?
- Does it matter if Redcar *(local area)* gets flooded off the map?

A QUESTION THAT IS…

Personal/relevant

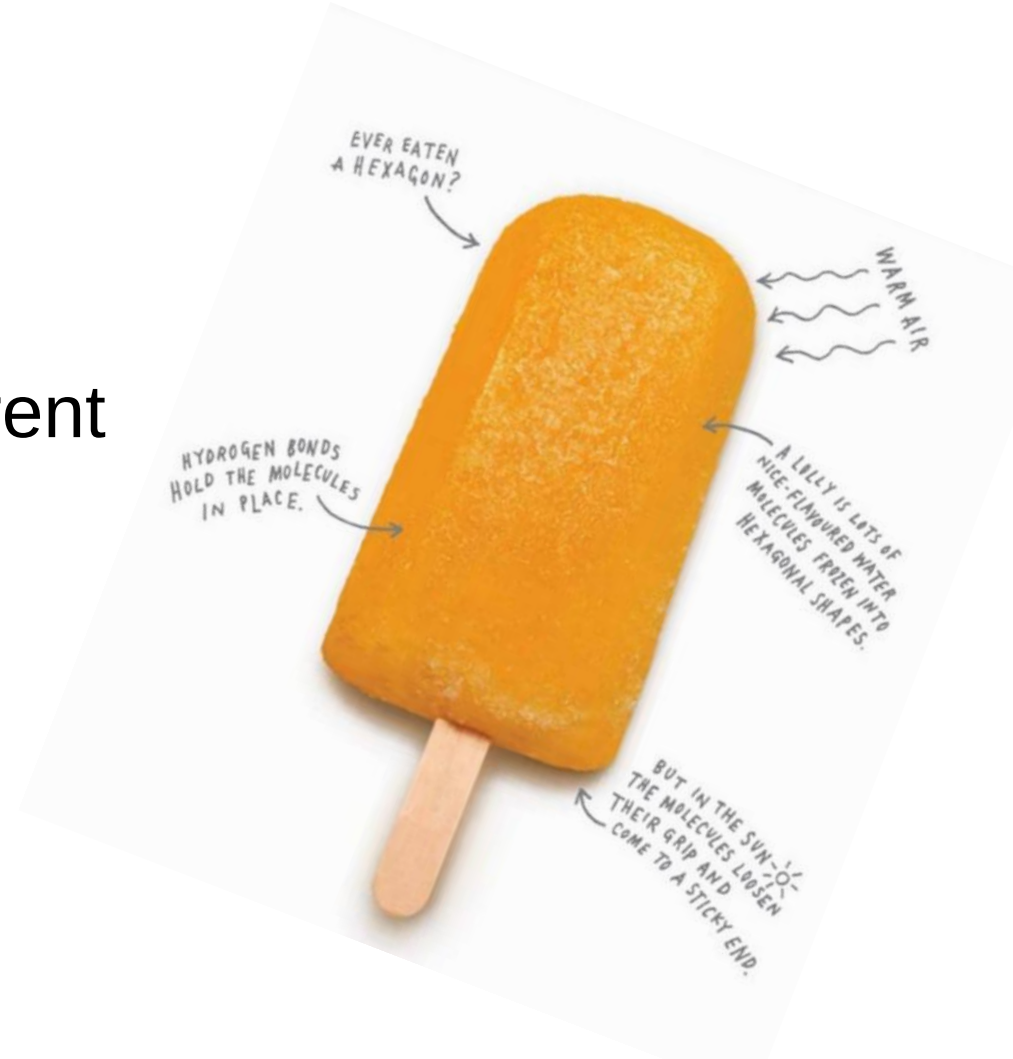
Linked to visitors' lives, community or current events

Surprising

Unexpected or humorous

Provocative

Opinion-generating, thought-provoking or curiosity-sparking



SCIENCE MUSEUM

OPENERS AND CLOSERS

INFORM

- Images
- Objects
- Games/apps
- Demonstrations/show and tell
- You & your conversations

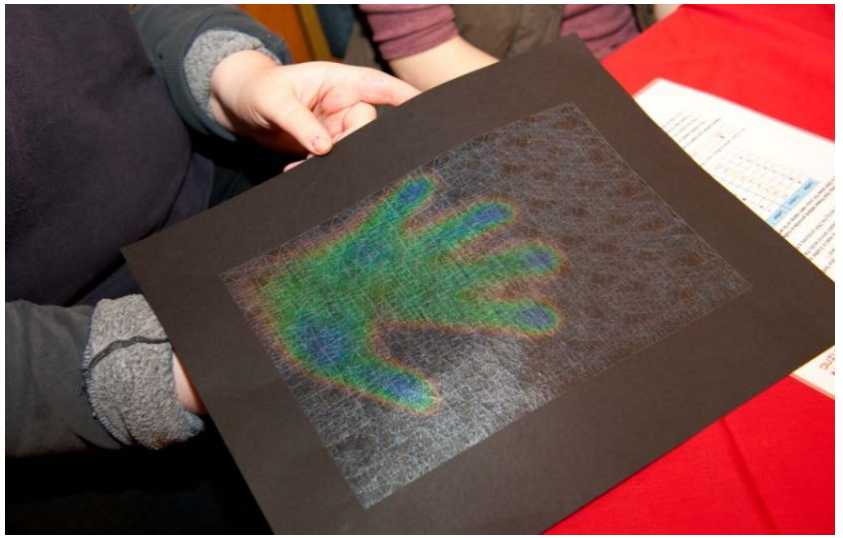
ENABLE

- Make and take
- Hands-on experiments
- Quizzes
- Digital technology/games
- Competitions/challenges
- Group tasks
- Object handling

WHAT MOTIVATES THE PUBLIC?

- Challenges and competition
- Curiosity - surprise and novelty
- Choice and control
- Play
- Personal relevance
- Positive reinforcement
- Social interaction

IDEAS FOR HANDS-ON ACTIVITIES



LEARNING STYLES

EXTEND

HOME

SCHOOL

EVERYDAY LIFE

INFORMAL SCIENCE SPACES

People experience and learn about science in many different places.

Help them to recognise science and make connections wherever they bump into it - to make the experience to last longer.

FACILITATION

- A two-way conversation
- A process that encourages people to come to their own understanding of a topic, e.g. by discovering something themselves

WHY FACILITATE?

- Independent thinking - discover and come to your own understanding of a topic
- Build on existing knowledge and experience
- Make links to personal interests and imagination
- Gets everyone involved
- Use and develop skills:
  - Observation and close attention
  - Listening
  - Enquiry
  - Curiosity
  - Creativity

MYSTERY OBJECTS

TOP TIPS

- Encourage using all senses to make initial observations
- Use open questions to get people talking and thinking
  - who, what, why, how, when
- Be a good listener
- Build on experiences and prior knowledge
- Summarise recent parts of the discussion
- Confirm key pieces of information
- It’s not always about guessing a mystery – it’s about helping people focus in and think more deeply

STICKY MOMENTS & SURVIVAL GUIDE

WHAT MAKES A GOOD INTERACTION?

- Use a hook: an object, image, or get them ‘doing’
- Make it personal & relevant – use the word ‘you’
- Keep explanations simple – more detail if they ask
- Ask questions and let them contribute
- Allow time to think
- Give encouragement and positive reinforcement
- Keep it short – they will stay if they want more!

JARGON

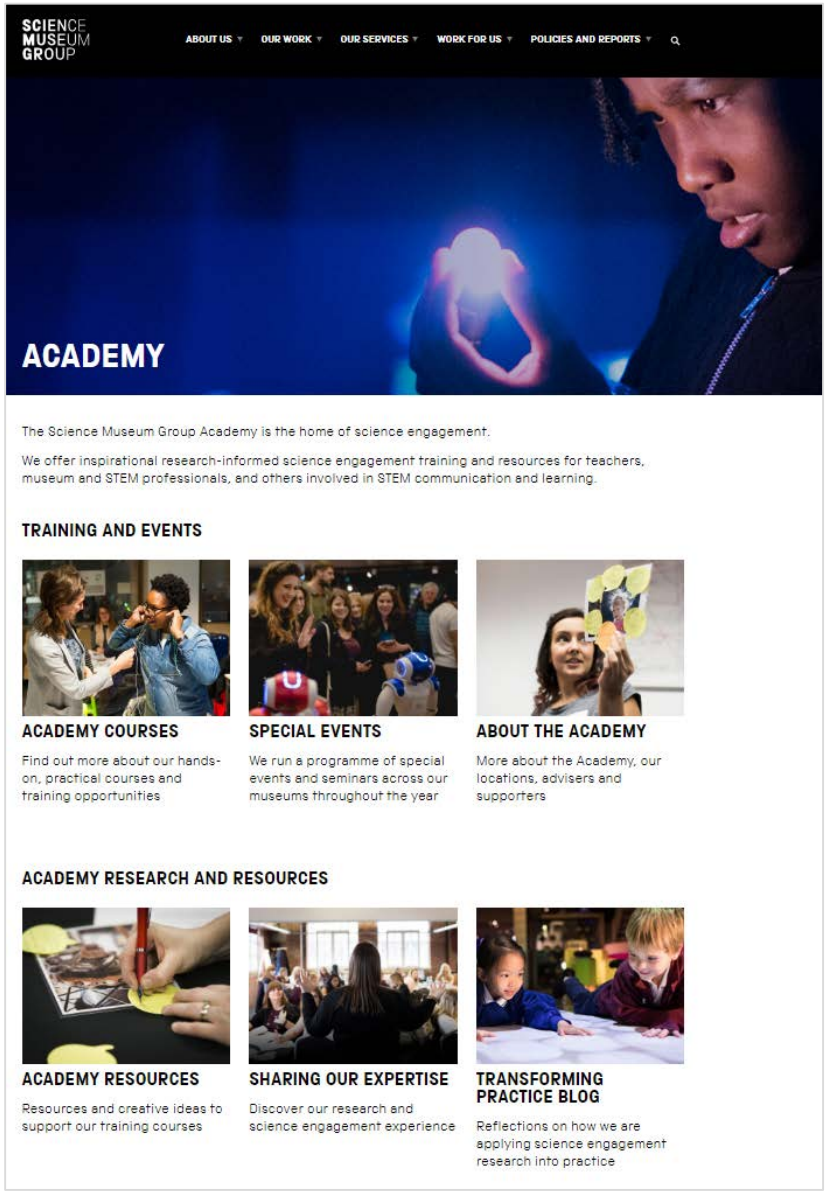

WE NEED SOME NEW JARGON, THE PUBLIC ARE STARTING TO UNDERSTAND WHAT WE'RE TALKING ABOUT!

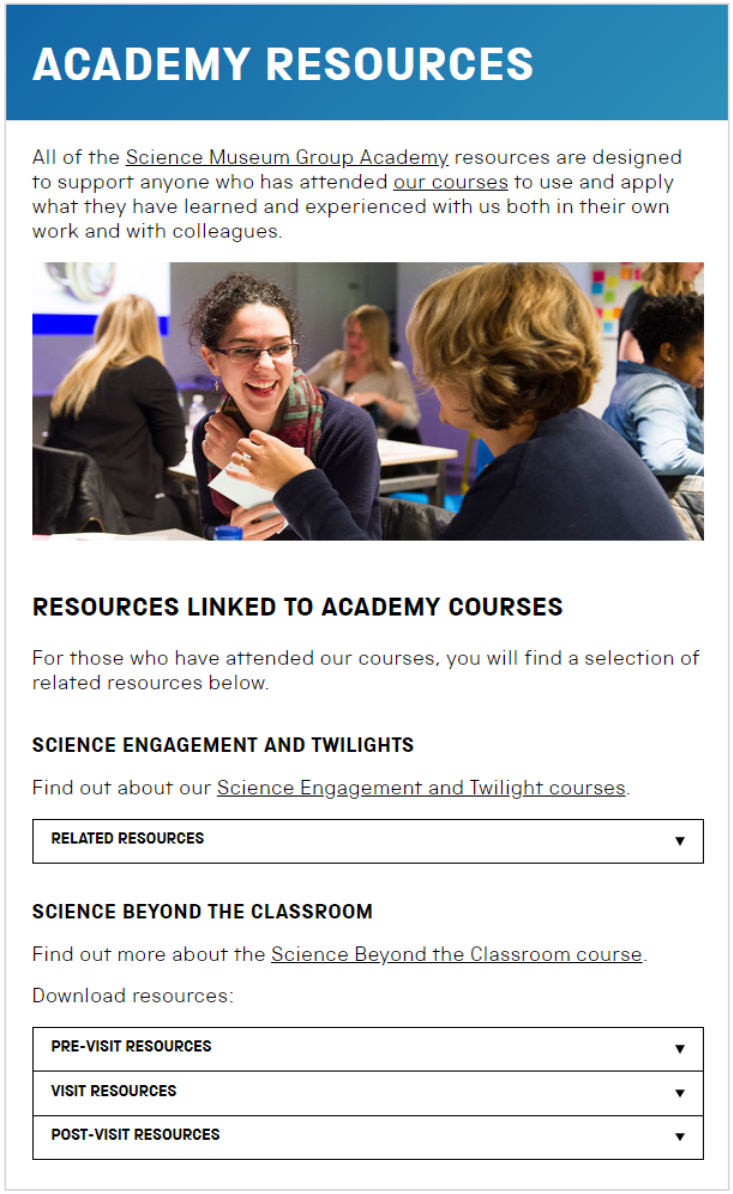
BRINGING IT ALL TOGETHER

AUDIENCE SCENARIOS

2-3 minute interaction

- Opener/Hook
- Introduce yourself
- Dialogue
  - Ask questions
  - Make connections
  - Learning outcomes
- Close it down





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