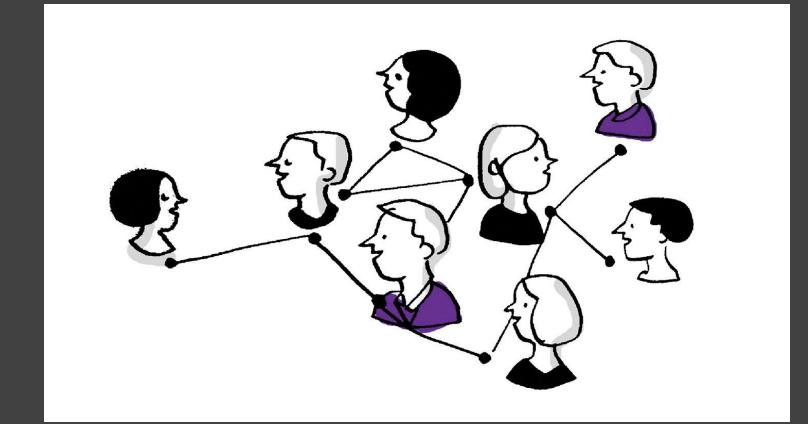
### Who reaches for science?

### Who science doesn't reach

Clare Matterson Director, Culture & Society, Wellcome Trust

wellcometrust

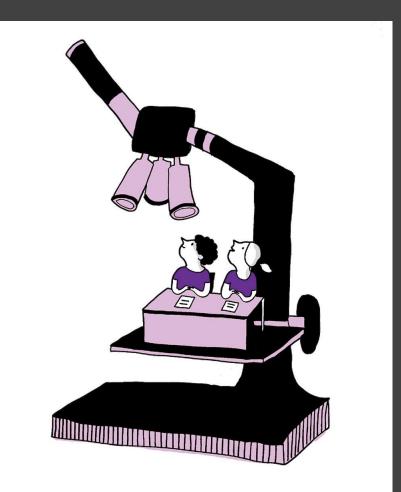
## National Forum for Public Engagement in STEM



## We're working together to link it all up

## What's under the microscope?

- Prioritising topics and identify gaps
- Improving models and approaches to funding
- Setting an agenda for research
- Gaining robust evidence to support advocacy
- Ensuring more effective evaluation





## SCIENCE LEARNING<sup>+</sup>

## Collaborative adventures in informal research and practice

Science Learning+ supports research to explore and understand the power of informal learning experiences inside and outside of school.

wellcome.ac.uk/SLplus

A partnership of







In collaboration with



MacArthur Foundation



## Why Science Learning+?



We are interested in:

- Understanding learning
- Engagement in STEM
- Skills development
- Equity
- Measurement of outcomes

## Key dates for Science Learning+

- January 2015
  - Phase 1 projects start
- October 2015
  - Phase 2 deadline (anticipated)
- Spring 2016
  - Phase 2 projects start up to 5 years



### Science Learning+ is more than grants

*"It needs to become a learning community"* 

SL+ will build bridges between the research and practice communities



## Who science doesn't reach

## Understanding and engaging challenging audiences

#### wellcome<sup>trust</sup>

Experiments in Engagement:

wellcometrust

## Disadvantaged groups are not all the same

- Ethnicity white British children
- Level of parental support varies
- Community groups, school environment, youth groups can have major influence

### What do these young people get up to?

- At home
  - Mostly television (occasionally documentaries)
  - Gaming (especially boys)
  - Social media (Twitter and image sharing platforms)
- Fewer structured leisure time activities
  - After school clubs
  - Sport
- Few young people, particularly in secondary schools, visited museums, even at weekends or holidays
- Most did not mention science-related activities

## For parents ....cost, safety, opportunity

There is nothing round here for the kids to do. The only thing at the community centre are fat clubs!

No good to us. I've got five kids, [family tickets don't] make it cheaper for me

There's no way my kids would be allowed to the park after about 5pm, there are some right characters hanging about

## For young people ....time pressures and confidence

I was asked to try out for the Scottish netball team, but I was too embarrassed to do it, then by the 3rd year I gave up going I have quite a lot to do when I get home, I have to help mum and do my studies so don't really have time to do much. I like to sit and watch TV

## For girls...not for us

It's for both, but mostly boys. Certain parts of it boys will be more interested in.

> I have some guy friends who suck eggs at some things but at science they are a whizz. It makes me really angry because I don't know what to do and they know everything

I think boys understand it better than girls

# For boys and girls ... involvement and language

It's dull, proper dull

When you are with your friends, every boring thing is fun!

I don't really like science to be honest, but I love experiments!

## For all... trust, empowerment, stimulation

Our coach, someone you already know, older than us and experienced with kids, club leader. Not a teacher.

We never did anything new, just the same thing each week so I stopped going [to karate] What doesn't work is actually trying to suggest an activity, organising it and getting them to come along. We need to get it from their perspective and what they want to do. (Youth worker)

## So...

None of this is new Intractable long term problems Deeply entrenched

No one group can tackle this alone Opportunity to prioritise, to work together "Science is like life. Science is hard and life is hard. You get new things in life; you get new things in science.

"The reason I say that science is life is that the way the building is made is science, the way the chairs are made. Everything you see around yourself is based on some law related to science or something...

"Maybe in some years' time all these things will change all because of science.

"It's like life moves on – it never stops."

Boy aged 17

## Three year challenge

What will look different ?

How will we know ?