# How to choose the right questions and ask them

Jenni Waugh
Cultural Engagement Consultant



## minibrum

















The Minibrum gallery and learning/engagement programmes aim to 'create a dynamic learning platform that meets developmental needs of younger children, promoting emotional, intellectual and physical wellbeing through engagement with STEM.'

#### **Evaluation contract covers 4 elements:**

- A. The co-production process on adults in phase 1 Minibrum gallery build
- B. The impact of the co-production process on children in phase 2 MiniMuseum
- C. The MiniBrum gallery
- D. The education and outreach programmes

### QUANTITATIVE: Things we can count

#### Thinktank family visitors

- a) Overall number of families visiting Thinktank with children up to 8 years old
- b) % of families which are from C2DE audiences
- c) % of families which are from BAME audiences
- d) % of families which include children with Special Educational Needs up to 8 years old
- e) % of families which live within a 90-minute drive of Thinktank / BCC constituency

#### **Schools and uniformed groups**

- f) Teachers, children and uniformed groups in Early Years Foundation Stage
- g) Teachers and children in Key Stage 1
- h) Uniformed groups for children up to 8 years old (e.g Rainbows and Beavers)

## QUALITATIVE — What difference does it all make?

The intended outcomes of the Minibrum project are to:

- Encourage young children to be aware of science in their everyday lives and communities
- Encourage children to overcome playful challenges through problem-solving and creativity
- Support a breadth of learning experiences: independent, child:child and child:adult
- Develop visitors' emotional and social skills through providing opportunities which encourage collaboration and team work

## Questions for enjoyment / gallery

- Which element of the Minibrum experience do the children like best? Why?
- Which element of the Minibrum experience do the adults like best? Why?
- Which do they least like? Why?

#### WHAT DOES THIS TELL US?

- how aware children are of science in their everyday lives
- levels of enjoyment, confidence and inter-generational experience
- Are there any gallery elements that need further development?

#### **EVALUATION TOOLS:**

**Gallery observations** 

Face to face survey – ask the whole group together

Self-complete questionnaire

### Questions about relationships

- Who are you visiting with today?
- Are children exploring and acting alone or with other people?
  - with siblings,
  - with parents/adults
  - With friends
  - Or are they collaborating with new acquaintances?
- What kind of interactions are taking place?

#### WHAT DOES THIS TELL US?

- how MiniBrum supports a breadth of learning experiences: independent, child:child and child:adult
- Impact on visitors' emotional and social skills through providing opportunities which encourage collaboration and team work

#### **EVALUATION TOOLS:**

**Gallery observations** 

Face to face survey – ask the whole group together

Self-complete questionnaire

Gallery tasks set by evaluator

## Questions about learning

- What impact does taking part in any Minibrum activity have on children's awareness of STEM in their everyday lives?
  - Do they need extra instruction or can they easily relate the settings in the gallery to real world examples?
  - Do they engage in creative role play? Solve the mechanical puzzles? Use all their senses to explore and discover?
  - Can they show the evaluator how it works?
  - Do they feel pride in their achievements?

#### WHAT DOES THIS TELL US?

- How aware children are of science in their everyday lives and communities
- How children can overcome playful challenges through problem-solving and creativity (Indicators of Effective Learning (UK Early Years Curriculum))
- Do the individual tasks work as we intended?

#### **EVALUATION TOOLS:**

**Gallery observations** 

Gallery tasks set by evaluator

7 interventions designed for ages0 to 8 years