



# Using drawings and interviews to collect data from children in family and school groups

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## Recognising children's rights & implications for museum work

- UN Convention: basic principles
  - Consider what will be best for the child
  - The right to be consulted
  - Freedom of expression through speech, writing, art
  - Access to information
- Article 31:
  - 'Recognize the right to rest and leisure, to engage in play and age-appropriate recreational activities and to participate freely in cultural and life and the arts'
  - 'Respect and promote the right to participate fully in cultural and artistic life and encourage the provision of appropriate and equal opportunities for cultural, artistic, recreational and leisure activities'
- Powerful resource in campaigning, consultation and policy-making

## Implications for museum practitioner and evaluators

- Aiming for meaningful participation
- Actively consult children in planning & demonstrate how they influenced the final decision
- Child-centred data collection methods & multi-method approach
- Evaluation linked to positive change for children
- Ethics of doing evaluation with children

## Doing evaluation with children

Types of data	Types of methods
what children do	observations, tracking
what children say	interviews, focus groups, informal discussions
evidence they leave behind	written material, drawings, PMM

## **Drawing as pictorial language**

- Meaning-making activity
- A means of communication
- Symbolic representation of thoughts, feelings & attitudes
- Open-ended nature of activity
- Child's creativity & imagination

## **Advantages of the method**

- Children's verbal and writing skills:
  - linguistic ability
  - speech and language difficulties
  - educational levels and cultural backgrounds
- Shy children & very young children
- Embed within the activity/experience

## **Uses of drawing as an evaluation method**

- Projective method:
  - understanding
  - group values
  - attitudes
  - personality
  - self in relation to others
- Non-projective method:
  - assessing children's developmental and intellectual maturity

## **Administration**

- Part of an activity or an exhibit
- Provide paper and pencil
- Ask the child to draw a picture (theme/title) or it may be part of another method (i.e. PMM)
- Ask the child what the drawing is about or to tell you a story about it

## **Analysing and interpreting children drawings**

Look for:

- Specific signs:
  - size
  - emphasis & exaggeration
  - omissions
- Overall impression
- Social, physical and cultural context

### Case study I: Spatial Understanding/Intelligence



*Drawing of a Greek flag used during the Greek revolution (1821)  
Boy, age 9  
War Museum, Athens, Greece*

For more information about this study:

Moussouri, T. (1997b) 'The use of children's drawings as an evaluation tool in the museum', *Museological Review*, 4, 40-50.

### Case study II: Family Agendas



*Drawing of a Roman shoe  
Boy, age 4  
Archaeological Resource Centre (ARC), York*



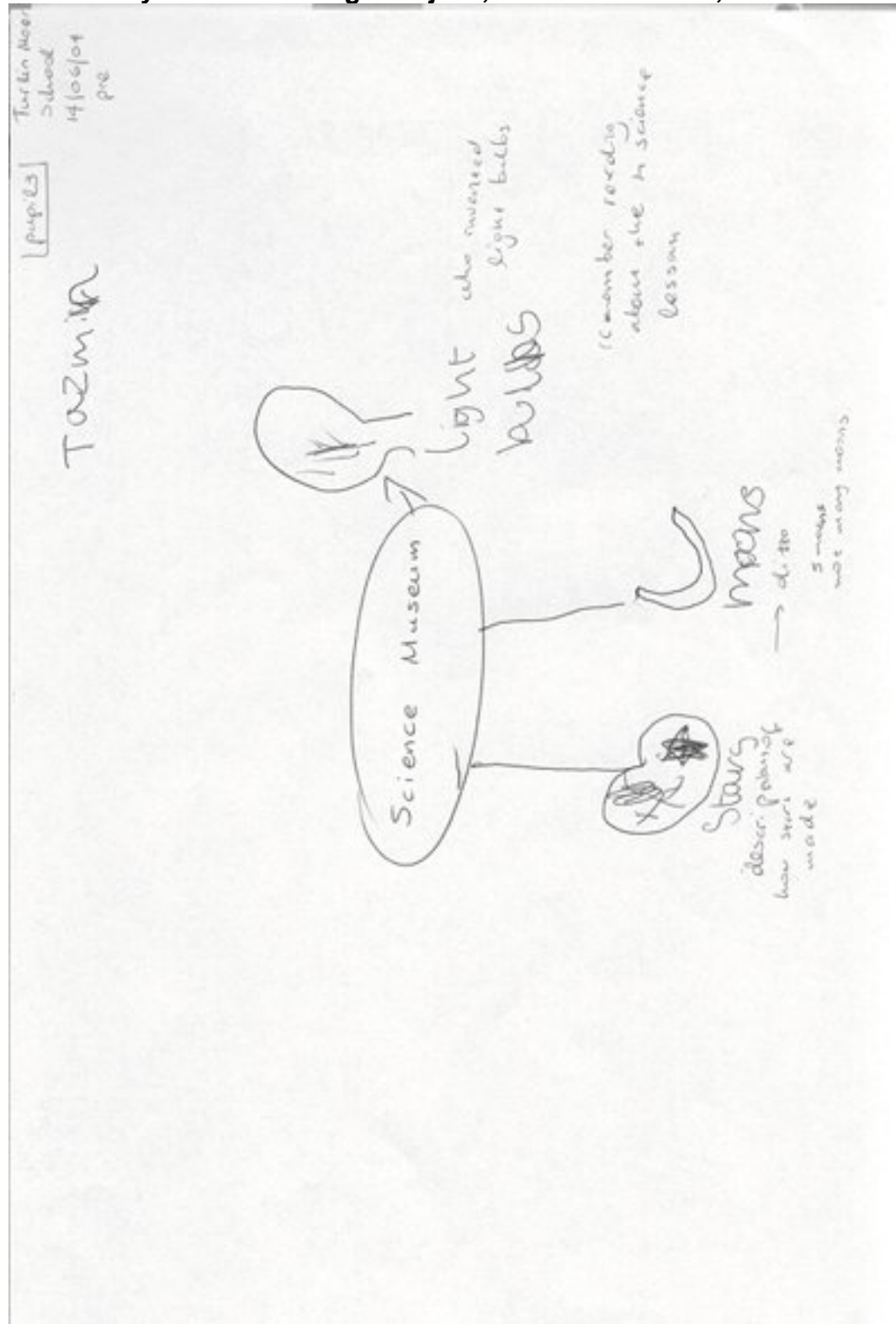
*Drawing of the Water Wheel exhibit  
Boy, age 4  
Museum of Science and Industry, Manchester*

For more information about this study:

Moussouri, T. (1997a) *Family Agendas and Family Learning in Hands-On Museums*, unpublished Ph.D. thesis, University of Leicester, Leicester, England.

Moussouri, T. (2003) "Negotiated agendas: families in science and technology museums", *International Journal for Technology Management*, special issue on science centres, Issue 25, No 5, 477-489

Case Study III: 'Glass Bridge Project', Science Museum, London



Personal Meaning Map 1  
 Girl, age 6  
 Science Museum, London



Project run in partnership between King's College ([www.exploratorium.edu/cils](http://www.exploratorium.edu/cils)), Audience Focus Ltd ([www.audiencefocus.com](http://www.audiencefocus.com)), and the Science Museum, London (<http://www.sciencemuseum.org.uk/>).

For more information about this study:

Osborn, J., Deneroff, V. and Moussouri, T., Clearing up theoretical and methodological approaches to the “informal” learning of science, paper to be presented at the 2005 NARST conference, 4-7 April, Dallas, USA

## **Conclusion**

- The voice of the children in evaluation
- Insight into children's perceptions, feelings & attitudes
- Can be part of the learning experience
- Can be used in longitudinal studies
- Qualitative and quantitative analysis

## References

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T. Moussouri, *Including Kinds in Evaluation*, VSG conference & AGM, V&A, 24/01/04

# Collecting Data from Children

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TYPES OF DATA	What Children Do	What Children Say		Evidence Children Leave Behind	
METHODS	Focused Observations Tracking	One-on-one Interviews	Group Focus Groups Discussions	Written Surveys	Performance Data Projects Presentations Assignments Journals Drawings
STRENGTHS	<ul style="list-style-type: none"> <li>- Track record in research (e.g., Piaget, Montessori); good research on role of play and learning in young child</li> <li>- Observe natural behavior, less invasive or intrusive</li> <li>- Good evidence for social interaction</li> <li>- Can document changes in behavior over time</li> </ul>	<ul style="list-style-type: none"> <li>- Retains integrity of child's words - Helps inform the "WHY?" of behavior, in-depth information</li> <li>- Good for revealing memories, to see connections made, perceptions</li> </ul>	<ul style="list-style-type: none"> <li>- Same as Interviews</li> <li>- Provides insight into the dynamics of group response</li> <li>- A quick way to get rich data</li> </ul>	<ul style="list-style-type: none"> <li>- Can quickly get a large sample</li> <li>- Less time consuming to collect</li> <li>- Can be embedded as part of the experience and made less intrusive</li> <li>- Lends to quantitative analysis</li> </ul>	<ul style="list-style-type: none"> <li>- Reflects actual work in the program</li> <li>- When embedded in the experience is less intrusive; can be part of the learning experience; self-reflection</li> <li>- Collection over time shows long-term effect</li> <li>- Lends to both quantitative and qualitative analysis; powerful evidence</li> </ul>
CHALLENGES	<ul style="list-style-type: none"> <li>- Provides little or no evidence as to WHY? children do what they do</li> <li>- Can be time-consuming to get a large sample size</li> <li>- Little or no research in role of play and learning for older children and play in an interactive free-choice environment (museums, science centers) is an important component</li> <li>- Need to be clear on boundaries and focus of observation</li> </ul>	<ul style="list-style-type: none"> <li>- Many children are shy and taciturn around strangers</li> <li>- Children tend to want to be agreeable, to say what they think you want to hear</li> <li>- Children have less experience in reflecting on their own process and action</li> <li>- Fairly intrusive</li> <li>- Can be time consuming</li> <li>- Parents or teachers can often hamper child response</li> </ul>	<ul style="list-style-type: none"> <li>- Same as above</li> <li>- Peer effect on responses can stifle dissenting opinions</li> <li>- Can be dominated by a few strong, talkative children</li> <li>- Some subjects not suited to focus groups, e.g., controversial or sensitive topics</li> </ul>	<ul style="list-style-type: none"> <li>- More data takes more time to analyze; need software</li> <li>- When part of the learning experience, need to allow for testing effect</li> <li>- Information is not in-depth, cannot probe answers</li> <li>- When tacked on to experience can be intrusive and considered punitive by children</li> </ul>	<ul style="list-style-type: none"> <li>- Analysis of performance data requires development and reliability testing of rubrics, consequently criteria and outcome goals must be very clear before start of program</li> <li>- Requires storage facilities, actual physical space or electronic scanner, etc., organization and management of data can be challenging</li> <li>- Analysis is time-consuming and requires specialized knowledge</li> </ul>
DEVELOPMENTAL ISSUES	<ul style="list-style-type: none"> <li>- Appropriate for all age levels, particularly with very young</li> </ul>	<ul style="list-style-type: none"> <li>- Can be effective with older children and adolescents in proper setting (low distraction)</li> <li>- Can work with younger children (ages 3-5) with modifications and very concrete props and prompts</li> </ul>	<ul style="list-style-type: none"> <li>- Best for ages 10 and over</li> <li>- Often good with adolescents</li> </ul>	<ul style="list-style-type: none"> <li>- Degree of literacy needed, problems with low achievers</li> <li>- Can be effective with ages 6-9 when facilitated by an adult</li> <li>- Most effective with children age 10 and older</li> </ul>	<ul style="list-style-type: none"> <li>- Can be effective with children as young as age 5-8 when evidence is collected over time</li> </ul>
STRATEGIES	<ul style="list-style-type: none"> <li>- A time-interval method allows for multiple subjects by one observer</li> <li>- Quality rating scales provide fairly reliable and valid data on degree of engagement with task and social interaction</li> <li>- Set situations, provide specific objects or images to observe response time and/or attraction rate, especially very young child.</li> </ul>	<ul style="list-style-type: none"> <li>- Provide concrete props, images, and specific prompts to focus interviews, especially for young children</li> <li>- Build interview protocol from series of conversations with children about topic</li> <li>- Involve children in development of interview protocol, their words/experience</li> <li>- Older children can sometimes be effective interviewers of young children</li> <li>- Have children make a drawing of their experience; use drawing to guide discussion</li> </ul>	<ul style="list-style-type: none"> <li>- Concrete props, images, and specific prompts or choices are helpful otherwise discussion can quickly become unfocused</li> <li>- Parents need to be separated from children</li> </ul>	<ul style="list-style-type: none"> <li>- Use of images (e.g., J and L) help reduce over-dependence on verbal skills</li> <li>- Children can help develop survey form, based on their language and experience</li> <li>- Keep form very simple and focused</li> <li>- Make form visually "fun" and interesting</li> </ul>	<ul style="list-style-type: none"> <li>- Process portfolios and journals are becoming more common in schools, can ride on those coattails</li> <li>- Can become an effective collaboration with teachers; performance data can also be used by them as assessment tool; they can help develop rubrics</li> </ul>

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T. Moussouri, *Including Kinds in Evaluation*, VSG conference & AGM, V&A, 24/01/04