Curatorial Inquiry, Seeding, and Wonder Rooms: New forms of Museum Communication and Learning

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Innovative learning in museums

A New Science of Learning

- Computational learning
  - Infer structural models from the environment
  - Learn from probabilistic input
- Social learning
  - Learning by imitation
  - Shared attention
- Neural learning
  - Learning supported by brain circuits that link perception and action
- Developmental learning
  - Behavioural development
  - Neural plasticity
- Teaching and learning
  - Principles of effective teaching

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“Insights from many different fields are converging to create a new science of learning that may transform educational practice”
Meltzoff et al., p284
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“A key component is the role of ‘the social’ in learning. What makes social interaction such a powerful catalyst for learning?”

Meltzoff et al., p288
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How can this new science of learning be aligned with the role and fabric of museums as places to exhibit and interpret collections for public education and entertainment?
Innovative learning in museums

Innovating Pedagogy

Seamless learning
Personal inquiry learning
Embodied learning
Crowd learning
Geo-learning
Learning from gaming
Citizen inquiry
Event-based learning
Learning through storytelling
Threshold concepts
Bricolage

www.open.ac.uk/innovating
<table>
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<th>Traditional museum Learning by...</th>
<th>Social media museum learning by...</th>
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<td>Curation</td>
<td>Co-creation</td>
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<td>Interpretation</td>
<td>Induction</td>
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Co-creation – by museums and individuals

Connection – between objects, times, locations

Induction – from examples to generalisations
Combining curation, interpretation and embodied interaction, with co-creation, induction and connection – within and beyond the museum
Three innovative pedagogies

Curatorial inquiry (Wolff & Mulholland)
Seeding (Sprake)
Wonder rooms (McFall)


Curatorial inquiry

To reconstruct museum content into new presentations, discover logical inconsistencies and other possible interpretations.

By organising and re-presenting museum artefacts in other contexts, we come to understand their shared value and meaning.
Children and teacher prepare inquiry in the classroom

Children collect objects and create interpretations in the museum

View and share in the classroom

Curate and present a personal perspective
Learning through touring

How people interact with the built environment by exploring the spaces around, between and within buildings

Stumbling upon
Noticing
Connecting

+ seeding

Behind the scenes at the V&A
Behind the scenes at the V&A

Visitor guide by children aged 13-14 to the ‘un-toured’ areas of the museum
Another couple of yards along you will see benches where there are apple cores and ice pole wrappers, crumbs of bread, not to mention crusts of bread. And there is a lollypop on the floor sticking to the ground.
Listen to the sound of our footsteps on the steps near to the shop entrance. They sound hollow because this is a false floor protecting the original floor underneath.
In the British Galleries

Start from the left hand side of the main door to these galleries.

Go forward 12 tiles.

Turn left. Go forward 3 tiles. 1,2,3.

Then go forward 1.

Now you have reached the loose tile.
Wonder and learning

Orchestrating wonder

Anticipation
Arrest
Exploration
Revelation

Wonder catapults people onwards in their learning journey
Associated with entities - wondrous things - otherness - mystery
By contrast with astonishment (immobile), amazement (confounded), awe (insignificance), admiration (subjugation)
Wonder curriculum

Orchestrating wonder

MAGIC SHOW
- Anticipating
- Divining
- Discovering

OBJECT LESSONS
- (Re)Searching
- Concealing
- Presenting

TREASURE HUNT
- Caring
- Competing
- Pursuing

CABINETS OF CURIOSITIES
- Experiencing
- Curating
- Considering

NATURE TABLE
- Examining
- Arranging
- Displaying

QUEST
- Investigating
- Wandering
- Showing

STUDIOS
- Reviewing
- Designing
- Constructing

FÊTE
- Transforming
- Connecting
- Celebrating

FORUM
- Preserving
- Reflecting
- Developing
“To credit of all concerned a great deal of effort had gone into presenting something resembling a school science fair but whose scope went beyond into intriguing areas of mystery, magic and the natural world. I was invited to examine fossils and crystals, try quizzes, play games, decipher codes, listen to music (and join in)... in short, to do and learn...It must have been a splendid learning experience.

Visitor Report by Denny Plowman, Nottingham City Museum and Galleries.” (McFall, 2014, p. 178)
Creating a Wonder Room

A space filled with objects such as animal skulls, teeth and old typewriters is engaging pupils in a novel way.

Nottingham Wonder Room 'changes attitudes to school'

A room full of puzzles, games and natural wonders has been created to inspire pupils at a Nottinghamshire school.
Wonder museum

Within a school (or a traditional museum)
Wonder museum

Learning by (re)curation
Wonder museum

Learning by touring and connecting
Bricolage

Learning through creative exploratory tinkering with objects

Curatorial inquiry
Acquiring, organising and re-presenting museum objects out of their normal contexts

Seeding
Creating playful multimedia guides to objects that are located within the museum but not part of its curated display

Wonder rooms
Creating miniature museums of wonder and cabinets of curios within institutional spaces
Bricolage

Continual testing of constraints within which learning can occur

Too much constraint and learning is stifled
Bricolage can “penetrate the exhibition space” (Bitgood et al, 1990)

Too little constraint and the activity is disorganised
Bricolage can support human-centred design and innovation
(http://beyondprototypes.com/)
Innovative learning and museums

Reconnecting digital experiences back to the physical museum

Curatorial inquiry

Learning through touring

Wonder rooms