



Evaluating the impact

How can we tell young children are learning?

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INTRODUCTION

Early childhood, which is generally accepted to be from birth up to the age of seven, is a unique period of development. Current thinking on neuroscience suggests that children are learning all the time and that their brains are continually reshaping and reconfiguring themselves in the light of experiences, sensations, facts and knowledge. This is particularly true of very young children for whom brand new experiences are a fact of everyday life.

Not only is it a massive period of physical and neurological growth, it is the time when dispositions to learning or learning how to learn, are critically formed. Although knowledge forms the basis of this, what is equally important is the way in which knowledge and skills are internalised by the child and then used in a self-driven context; this is sometimes described as 'self-initiated activity' or 'learning through play'. What this means in practice is that children of this age need ample opportunities to make sense and take ownership of knowledge and skills they have been taught, and use them in ways that help them to fulfil and explore their own ideas and interpretations of them. This desire to learn is strongly characterised by being 'intrinsic', meaning it is from within and is something the child clearly wants to do, rather than by external motivation. Motivation is a critical component of the learning process and enables children to challenge and 'stretch' themselves to access new skills, information and understanding. It also forms a realistic reference point from which facilitators can conclude how impactful their input has been.

There are also credible theories that learning is not a single act, but is multifaceted and responsive to the type of learning that takes place. Roger Saljo¹ refers to the concepts of 'deep' and 'surface' level learning; the latter being the acquisition of facts and discrete knowledge, the former being the process by which this is connected and utilised. For example, a child may have learnt the name of a colour and then uses this to describe an object in order to identify it. This dynamic relationship between 'surface' and 'deep' level learning is a continual and vital aspect of children making sense of and using what they know.

Professor Ferre Laevers² uses a concept of 'involvement' to describe high level and intensive cognition, when children are deeply engrossed and engaged in an activity or thought process. Laevers explains that this state involves the highest levels of thinking and brain activity and can be effectively observed by watching children's body language, facial expression and ability to remain undistracted.

This was built on Csikszentmihalyi's concept of 'flow'³, described as 'the mental state of operation in which a person performing an activity is fully immersed in a feeling of energised focus, full involvement, and enjoyment in the process of the activity. In essence, 'flow' is characterised by complete absorption in what one does, and a resulting loss in one's sense of space and time.' This concept provides an important consideration for understanding the meaningfulness of children's experiences; the impact of what is being taught and how effectively it is being learned.

EVIDENCE OF LEARNING

Young children's interest and enthusiasm is self-evident and genuine; at this age they are authentic in their reactions and honest in their expressions. Laevers indicates that a high level of 'involvement' is characterised by specific visible attributes ²:

- 'Signals of concentration, persistence and energy are strongly represented'. Children take care with detail, their body language is intense and focused on the task in hand, they often purse their lips, furrow their eye brows, grimace as they encounter obstacles or difficulties, but critically they continue, they 'bounce back' and don't give up. A picture may not turn out how they want it to so they start again or adjust it; a model collapses so they refine the structure.
- 'They readily make choices and as soon as they have started an activity they are completely absorbed'. There is a logic and progression in what they are doing and often children make what appear to be immediate choices. This is because they have started to anticipate what is happening, sometimes whilst talking about this they provide their own narrative: 'I'm going to draw the fox in this space here because there is nowhere else on the picture it will fit'.
- 'Even strong stimuli in their surroundings will barely distract them'. Once focused the activity becomes more important than anything else around them and they will not be drawn by loud noises, other activities or attempts at conversations. They may ignore other people completely or tell them that they are busy and can't talk to them now.
- 'They take pleasure in exploring the world and operate at the very limits of their capabilities'. Children are naturally joyous and exuberant when engaged in something that truly interests them and will talk about it out loudly, sometime to themselves. They might sing, hum, laugh out loud, clap and even shriek with pleasure, especially when something has been achieved or a particularly difficult problem has been resolved. They will pull in all the knowledge that has been learned to create or express an idea – this is strong evidence of both 'surface' level (acquiring facts and knowledge) and 'deep level' learning (making sense and connecting different knowledge together).

Recording this in a variety of ways and using different types of media allows facilitators to ascertain that a child is learning. This might be through observing children during a session, taking photographs or asking the children, or their adults, to describe their thinking and understanding.

PUTTING IT INTO PRACTICE

So how can this kind of expression and demonstration of learning be facilitated? How can opportunities and scenarios be created in museums to enable children to act in this way? There are certain types of activities with which most young children have familiarity and can apply their knowledge and information.

Setting these as the context will enable a greater chance of children taking new ideas into practical experiences. Here are some examples of how you might facilitate this learning.

- Storytelling is a universal and common feature in early childhood development. We can extend this familiar experience by using props to further help children engage in complex plots and characters. Sometimes this can be achieved through using costumes, role play clothes or puppets.
- At the Museum of London Docklands, facilitators often incorporate real objects into activities and use them to introduce new concepts. During these storytelling activities, children have the opportunity to make choices which develop the story and often become completely absorbed.
- The use of 'small world' objects can be used in a similar way and be representative on a larger scale. Given scenarios with this and opportunities to explore, sometimes with and sometimes without direct adult support, understanding and application of knowledge can be demonstrated through the complexity and details of the story being told.
- At the Museum of London Docklands, opportunities for this type of uninterrupted play are provided through a series of hands-on, self-led gallery displays where children can engage in activities such as shop or gardening role play without being forced to stop at a set time. Whilst engaging in these activities, children won't be distracted easily and will show strong signs of concentration, persistence and energy.
- Problem solving is also a consistent feature of children's learning. Presenting a situation where an obstacle or difficulty is apparent, you will see children utilise existing skills to blend with new information to realise a conclusion. Museum facilitators can incorporate this into their planning and ensure activities contain elements of problem solving or an opportunity to problem solve.
- At the Museum of London Docklands, the Mudlarks children's gallery includes many opportunities for problem solving, such as loading and unloading a ship and seeing how different loads affect the tilt or placing dams in a river and seeing how they alter or stop the flow of water. This type of problem solving provides children with opportunities to demonstrate their ability to make choices and absorb themselves in what they are doing, as well as taking and demonstrating pleasure in putting their knowledge to the test.

These examples will allow for some attributes of involvement to be demonstrated but probably not all in one instance. Ideally, museum activities should include opportunities for all attributes of involvement to be displayed.

CONCLUSION

Using artefacts and creating scenarios based on historical understanding provide exciting and innovative ways of connecting children to our past. By developing an understanding of the nature of young children's learning and how they present this, we can tap into the varied opportunities of making learning real for them.

It is important that as museum facilitators, we understand the importance of not interrupting children's flow and providing children with opportunities to explore. Stepping back and observing children's learning, provides us with a useful tool for evaluation and to inform future planning.

Early Years toolkit

REFERENCES

- 1 **Saljo, R** (1979) The concept of learning
- 2 **Prof Ferre Laevers** (2012) A process-orientated monitoring system for the early years
- 3 **Wikipedia contributors** (2018) [Flow \(psychology\)](#) Wikipedia, The Free Encyclopedia