

Characteristics of Effective Learning Creating and Thinking Critically

Babies and young children have an inbuilt drive to learn more about their world. To make the most of their opportunities, they need a willingness to engage in learning through play and exploration and also the ability to control their thinking so that they can process information and develop their ideas. Initial attempts to solve problems will involve trial and error but as very young children's experiences increase, they become able to choose from and employ a range of strategies. Creating and thinking critically refers to children creating ideas, thinking flexibly and drawing on their previous experiences and then using a rational approach, or thinking critically to choose the best idea to solve a problem. This is why it is essential for children to have opportunities to play and explore with resources and ideas in a range of contexts so that they are able to discover connections and develop better understanding.

Much of our thinking is automatic, for example, we know how to get dressed in the morning by going through a series of well-known steps, however, solving problems outside our experience involves controlling our thinking. For example, when putting together a piece of flat pack furniture with minimal instructions, we need to think critically and decide on an approach that it most likely to succeed and then probably rethink and try another!

Language is a vital element of higher level thinking skills. As adults, we usually think silently, however, children whose language is rapidly developing will need to verbalise. Early years practitioners can help children through modelling and scaffolding thinking for them. There are many helpful suggestions in the positive relationships column on the creating and thinking critically page of Development Matters in the EYFS.

The EYFS describes three aspects of creating and thinking critically:

Having their own ideas

Children need a wide variety of experiences to draw on in order to come up with their own ideas in new situations. Role play is a rich resource for providing children with opportunities to make sense of things they already know and develop their thinking and ideas further. Imaginative play is a process rather than a product as anyone who has observed children in the role play area knows only too well.

If you were asked to imagine something, you would probably create a mental picture, however imaginative thought is more sophisticated than this, it is about being able to think flexibly and combine ideas to create something unique.
outdoor provision and of materials found in the natural world.

Making links

This aspect refers to children noticing patterns in their experience. For example a young child might think that anything large and heavy would sink rather than float in water as this is what their previous experience tells them. In this way, they are making links in their learning. Providing larger wooden objects will challenge their thinking, encourage them to question and lead to deeper understanding.

Linking information and experiences can lead to the ability to make accurate predictions which is an important skill in many areas of life. Memorising and recalling facts and information is limited and adults who are able to filter information, decide what is useful and important, imagine something new and combine ideas in unusual ways are vital in careers such as business and the sciences.

Choosing ways to do things



Children need to be able to plan and make decisions about how to approach an activity to be successful. They also need to be confident enough to review how well things have gone and to choose a different approach should the first one prove unsuccessful. They need to be resilient and open enough to consider how they might have approached it differently for an even better result. Through this they will develop a reflective approach to their learning and will maximise opportunities.

Implications for provision

- Provide prompts in the environment that remind children of their previous experiences for example photographs of models in the construction area and displays of child initiated creative work.
- Avoid activities that involved children reproducing other's ideas. Ensure that opportunities are open ended so that children are required to draw on previous experiences or learn from each other.
- Use visual prompts for the routine so that children are able to accurately predict and make connections with previous experiences.
- Challenge children's thinking through providing new and inspiring resources and giving children opportunities to explore these freely and make connections.
- Plan activities that don't repeat but link to previous activities to ignited children's interests and curiosity.
- Take a series of photographs of children thoroughly engaged in purposeful activities so that you can display learning stories to discuss or to spark future ideas.
- Ensure there are rich opportunities for children to engage in imaginative play.



Adult role

- Talk to parents and observe children to gather key information about individual children's interests and fascinations and include relevant and stimulating resources in provision.
- Model being a thinker yourself, through verbalising as you solve problems and through sharing your own every day experiences of problem solving.
- Support children to develop a range of strategies through open questions or comments.
 - I wonder how you made that.
 - Do you think there was another way of doing it?
 - You really tried something different that time.
 - I can see you really worked hard.
- Allow children to lead conversations and join in with thinking about things together.
- Encourage children to talk about the problems they encounter and how they have overcome them.
- Seek time for in-depth shared conversations to support children to connect ideas and develop their thinking.
- Encourage children to talk through and bounce ideas around as they play and engage in activities.