

The Five Characteristics of a *Conceptual Playworld* (Fleer, 2018)



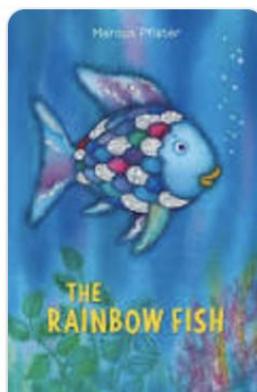
In this abridged version of **The very hungry caterpillar**, by **Eric Carle**, infants and toddlers experience the puppet caterpillar eating its way through a series of 5 types of fruit – ending up as the caterpillar. Other board books are shown below that could also be used to plan Conceptual PlayWorlds for early childhood STEM.



The Grouchy Ladybug
Eric Carle



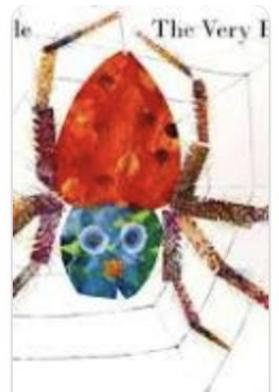
Brown Bear, Brown Bear, ...
Bill Martin, Jr.



The Rainbow Fish
Marcus Pfister



Where the Wild Things ...
Maurice Sen...



The Very Busy Spider
Eric Carle



Pedagogical characteristics	Pedagogical practices that are planned
<p>Selecting a story for the <i>Conceptual Playworld</i></p>	<ul style="list-style-type: none"> ■ Working with understandings of the context of children’s development and their interests (Food – experience of eating; Nature – experience of moths and butterflies) ■ Selecting a story that is enjoyable to children and adults (The very hungry caterpillar by Eric Carle) ■ Building empathy for the characters in the story (Children experiencing the drama of eating so much food, enjoying nature through what they observe around them) ■ A plot that lends itself to introducing a problem situation to the children (How does a caterpillar turn into a butterfly?) ■ Being clear about the concept and its relation to the story and play plot to be developed (Mathematics – sense of number developing through each number having a group of fruit; rote counting to learn number sequence; Science: Wonder about the process of metamorphosis)
<p>Designing a <i>Conceptual Playworld</i> space</p>	<ul style="list-style-type: none"> ■ Creating different spaces that give opportunities for exploring both concepts (Caterpillar/butterfly has a garden with flowers and leaves to eat) and social and emotional development (eating and changing – metamorphosis – children also grow and change) ■ Designing different opportunities for child initiated play in ways that develop the play plot further or explore concepts and make them more personally meaningful (Being the caterpillar and eating the food and changing. Having a fabric tunnel for children to crawl into – being the chrysalis – then emerging as a butterfly with fabric wings) ■ Planning different opportunities for representing children’s ideas and expressing their understandings (toddlers embody the experience of change through role playing eating, growing, chrysalis, then emerging as a butterfly)
<p>Entering and exiting the <i>Conceptual Playworld</i> space</p>	<ul style="list-style-type: none"> ■ Whole group enters the <i>Conceptual Playworld</i> (Visiting the garden) ■ All the children are in the same imaginary situation (Being in the garden together, enacting the very hungry caterpillar together)



Pedagogical characteristics	Pedagogical practices that are planned
	<ul style="list-style-type: none"> ■ Children choose characters as they enter into the imaginary situation (be different varieties of caterpillars, similar to ones they have at home or see on YouTube; they can also be a family of caterpillars) ■ Teacher is always a character in the story or acting as a human prop (e.g., such as particular plants in the garden that attract the butterfly to lay eggs or being part of the caterpillar family eating leaves or the fruit as shown in the storybook)
<p>Planning the play inquiry or problem scenario</p>	<ul style="list-style-type: none"> ■ Children have enough knowledge to be able to solve the problem – introduced inside or out of the imaginary situation (Making a map of the pathway of eating taken by the very hungry caterpillar in the book; Designing an alternative route to more suitable food; using YouTubes to learn about different butterflies, metamorphosis, and appropriate food) ■ The problem scenario is dramatic and engaging (Helping the caterpillar to grow; be safe from predators, needs a garden map of good food to eat, adults prepare a real size map with objects on it, such as plastic fruit, real leaves, pot plants, the fabric tunnel to crawl through for the metamorphosis) ■ Problem scenario is not scripted, but a general idea of the problem is planned (An alert message is left for the children – someone spotted a hungry bird. Message could be left on the mobile phone to say the caterpillar needs help hiding, or a map to find a safe place) ■ Being clear about the concepts that will be learned from solving the problem situation (Science – growth; life cycle of a butterfly; Mathematics – concept of number; maps are representations of their world; Prepositional language and spatial relations when visiting the garden; technologies - plan view orientation if the educators draw maps; using digital devices to find needed information in sound and visual form) ■ Concepts are in service of the play (Need to be able to prepare a map, discuss the position of the hungry caterpillar and the hungry bird using prepositional language; using YouTubes to see how a caterpillar becomes a butterfly – metamorphosis; learning about suitable food for a caterpillar)

Pedagogical characteristics	Pedagogical practices that are planned
<p>Planning teacher interactions to build conceptual learning in role</p>	<ul style="list-style-type: none"> ■ Teachers working in interactional pairs: Teachers are not always the same character. Roles are not scripted Teacher A takes gardener role, and invites other children to watch/help feed the hungry caterpillar; Teacher B invites some children to be caterpillars – perhaps parent or other educator does this role with children who want to be in the caterpillar family; Teacher C is the hungry bird planning how to catch the caterpillar – and invites children to be birds also wanting to eat caterpillars) ■ There are different roles teachers can take: Teachers plan their role for the playworld to be equally present with the children, or to model practices in role, or to be needing help from the children. Their role can also be as together with the child leading (primordial we), where they literally cradle the child or hold their hand and together act out the role or solution ■ Conceptual intentions are planned: Planning of who will have more knowledge and who will be present with the children to model solving the problem

Fleer, M. (2018). *Conceptual Playworlds*: Foregrounding imagination and creativity as foundational for children's learning, Monash University Working Paper: <https://www.monash.edu/conceptual-playworld>