



**Education for Sustainable Citizenship:
Think children's future today!**



Effective Practice in Early Childhood Education for Sustainable Citizenship: The OMEP UK Early Childhood Education for Sustainable Citizenship Award

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www.johnsb.org.uk
www.omep.org.uk/esc/



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Organisation Mondiale pour l'Éducation Préscolaire



UNESCO Global Action Programme: Building the Capacity of Educators and trainers (Network 3)

Siraj-Blatchford, et al (2021) *An Evaluation of the OMEP UK Early Childhood Education for Sustainable Citizenship Award*, Education and City: Quality Education for Modern Cities, European Proceedings of Educational Sciences, Vol. 2

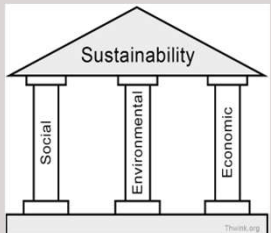
OMEP Research in Preschools in: Chile, China, Kenya, Korea, Norway, Portugal, Sweden, Turkey, United Kingdom, and USA



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Education for Sustainable Citizenship

(Bruntland Report, 1987)





"A sustainability citizen is someone who displays pro-sustainability behaviour." (Dobson, 2011)

"Sustainable citizenship as a life-long emergent capability." (Siraj-Blatchford and Brock, 2016)


Young children are the major stakeholders...

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The three 'Pillars' of Sustainable Development

SURVIVAL?



- Disposable cups
- Plastic bags
- Plastic water bottles
- Disposable cutlery
- Single use razors
- Microbeads
- Wet wipes
- Antibacterial soaps
- Aerosol cans
- Detergent
- Phosphates
- Chlorine Bleach

The three pillars are interdependent and the survival and sustainability of every organism depends upon all of these conditions being satisfied: "We are All Nature".

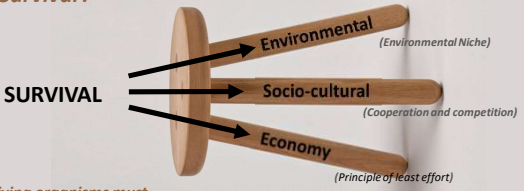
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Economics: 'The Science of Scarcity' (Robbins, 1932)

Biological Adaptation

Adaptation is a central feature in the development and behaviour of all biological organisms - including **homo sapiens**.

'Sustainability' is ultimately a question of 'Survival'.



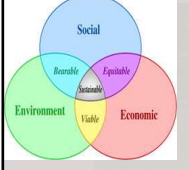

SURVIVAL

All living organisms must sustain their energy and nutritional resources. They have to judge the potential payoffs of pursuing different actions.



The need for sustainable 'economy', is one shared by all living organisms, and is often considered the **'universal imperative'**.

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The three 'Pillars' of Sustainable Consumption

Sustainable Preschool Consumption





Purchasing:

- 'Green' cleaning fluids and detergents.
- Non-plastic products and packaging.
- 'Green' Energy Suppliers
- Sustainably...

Creating an ETHOS of sustainability

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Rights from the start

United Kingdom

Key features of the OMEP UK ESC Award:

- Child-centred and not curriculum-centred (i.e. ESD is not a curriculum bolt-on extra).
- It has an international OMEP/UNESCO research base.
- Seeks to improve learning outcomes across the whole EYFS curriculum.
- Strongly grounded in parent partnerships.
- Covers all of the SDGs and the three defining Pillars of ESD.
- Provides a 'celebratory approach' with children learning to take pride in their sustainable citizenship.

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What is involved?



- Curriculum Self-Audit Tool – Bronze, Silver and Gold Levels
- I-care Activities for parents: Five at each Award level for Environmental sustainability, Social-cultural sustainability and Economic sustainability (+ Sustainable Literacy and Numeracy).
- Each child has a 'Passport' – supporting 'Citizenship' and summarizing the UN Convention on the Rights on the Child.
- The passport comes with certificates that are awarded like 'visas' as each i-care course is completed with parents (15 in total).



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Home Learning: "I Care" activities – with a strong focus on 'sustainable behaviours'.

Suggestion	"I care..."	Date/Details
Show water pipes under taps, water meter and picture of a television.	I care about my water	7-10-20
Provide electrical games or access to a television.	I care about saving electricity and turn off an electrical appliance when I have finished using it.	Matthew knows to switch off the TV for the following reasons; Cool down the TV, save electricity & save money on bills. 2.6-1-20

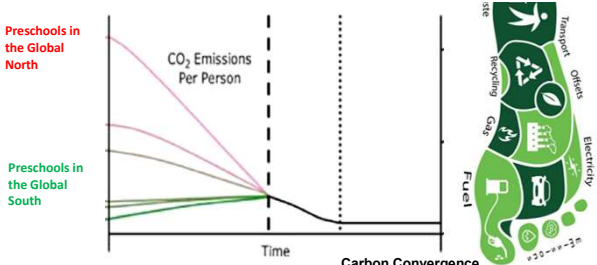



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17 PARTNERSHIPS FOR THE GOALS

STRENGTHEN THE MEANS OF IMPLEMENTATION AND REVITALIZE THE GLOBAL PARTNERSHIP FOR SUSTAINABLE DEVELOPMENT

At the Silver Level the Preschool Partnerships are based upon the principles of 'Carbon Contraction and Convergence'



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What is Effective Ecological Pedagogy?

The 'Prime Directive':

"...the most important single factor influencing learning is what the learner already knows. Ascertain this and teach him accordingly"

Ausobel et al, (1978) Educational Psychology: A Cognitive View, Holt

The Child Comes First




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An Ecological perspective of learning and development: **We perceive the world according to the 'affordances' that it offers us.**

(James and Eleanor Gibson)


'Affordance' - the use or purpose that a thing has...

WHAT IS THIS?




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The 'Butler's delight'



Objects and phenomenon are perceived in terms of the 'affordances' that they provide.

Piaget recognised that knowledge and understanding requires both:



Schema – figurative knowledge
Scheme – operations (affordances)


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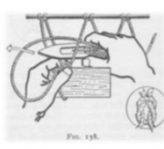
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The Netting Needle

'Affordances'



Objects and phenomenon are perceived in terms of the 'action possibilities' they provide.



Schema – figurative representation
Scheme – operations (affordances)

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Example Schèmes


Identified by **Chris Athey (1990)**

Transporting	A child may move objects or a collection of objects from one place to another, perhaps using a pram or truck.
Containment	Putting things into containers and removing them repeatedly –e.g. into baskets, buckets, bags and carts.
Orientation	This scheme is shown by interest in a different viewpoint, as when a child hangs upside down or turns objects upside down.
Enclosure	A child may build enclosures with blocks, Lego or large crates. An enclosing line often surrounds paintings and drawings.
Ordering	Sequencing objects by size, or placing small world toys in lines.
The family of trajectories	A fascination with things moving or flying through the air – balls, balloons, aeroplanes, rockets, Frisbees, or draw zig-zags, construct or are fascinated by ramps and anything that has slope.

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Schèmes

Prerequisites to further learning...



Connecting **Positioning** **Enclosing/Containing**

Rotation **Transporting** **Trajectories**

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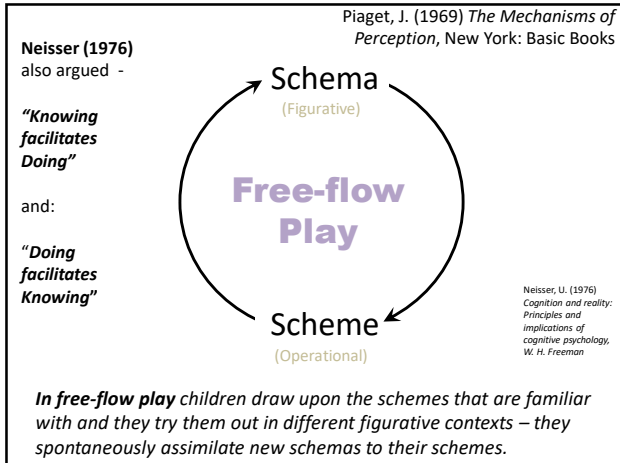
'Containing' = Scheme



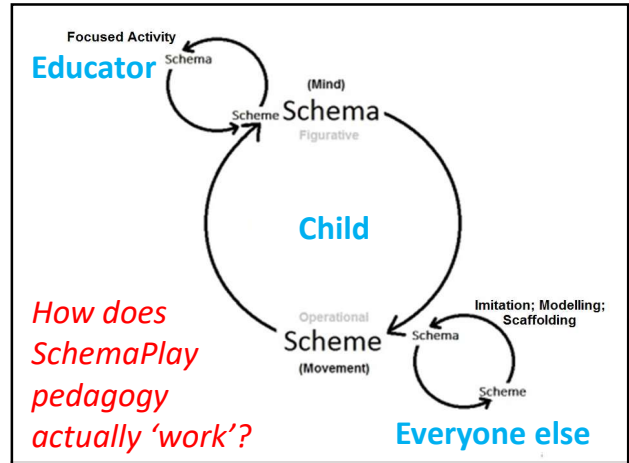

A Scheme like 'Container' is a 'conceptual primitives' or grounded metaphors of 'Classes' (Nu 2000)



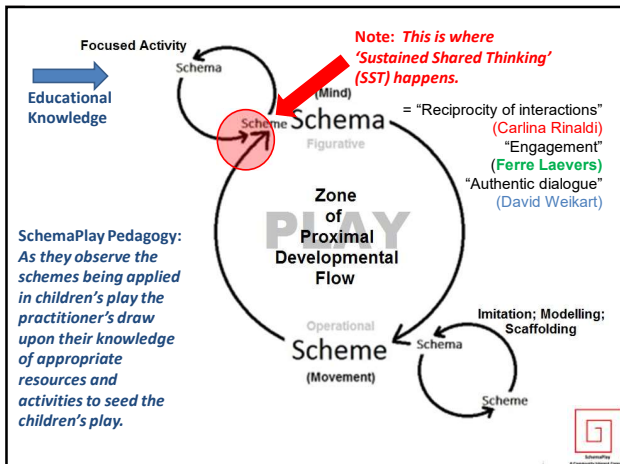
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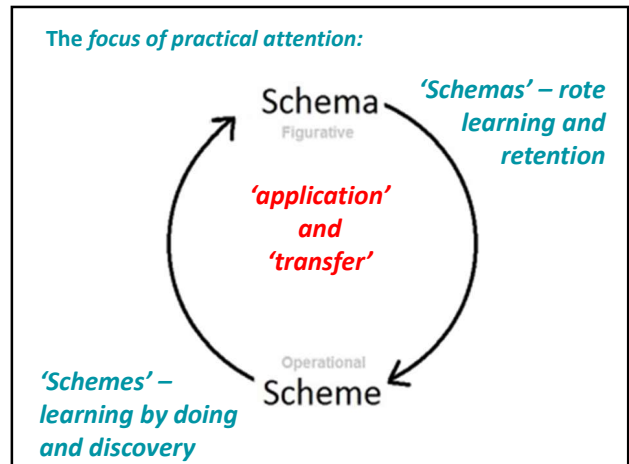
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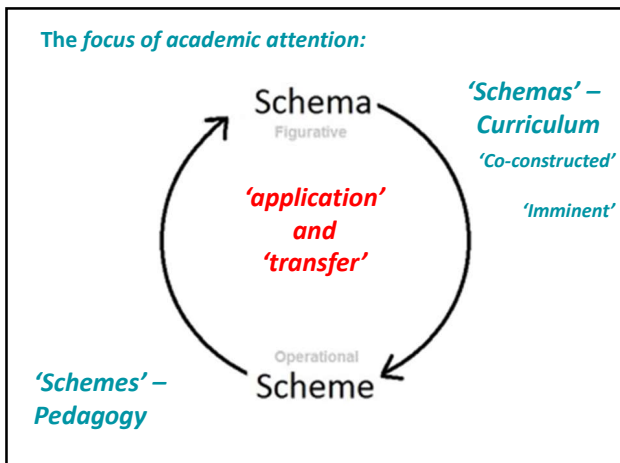
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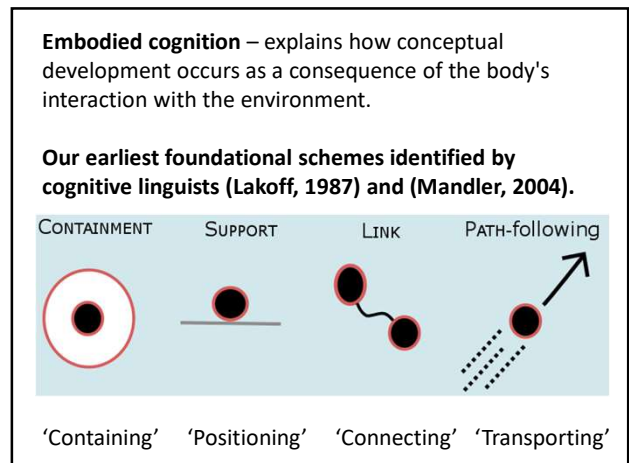
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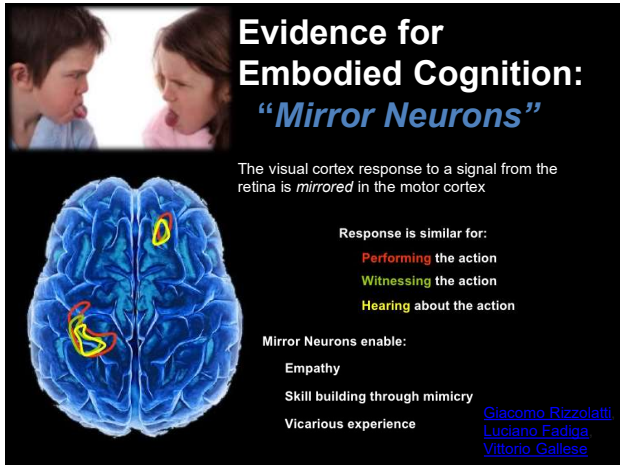


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Evidence for Embodied Cognition: "Mirror Neurons"



The visual cortex response to a signal from the retina is *mirrored* in the motor cortex.

Response is similar for:

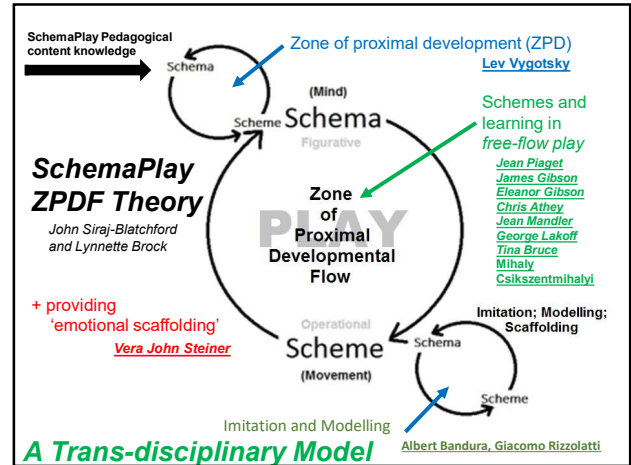
- Performing the action
- Witnessing the action
- Hearing about the action

Mirror Neurons enable:

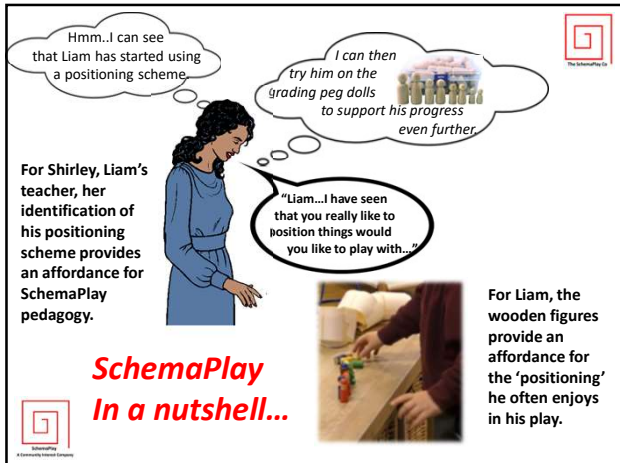
- Empathy
- Skill building through mimicry
- Vicarious experience

[Giacomo Rizzolatti](#)
[Luciano Fadiga](#)
[Vittorio Galiese](#)

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Hmm...I can see that Liam has started using a positioning scheme.

I can then try him on the grading peg dolls to support his progress even further.

"Liam...I have seen that you really like to position things would you like to play with..."

For Shirley, Liam's teacher, her identification of his positioning scheme provides an affordance for SchemaPlay pedagogy.

For Liam, the wooden figures provide an affordance for the 'positioning' he often enjoys in his play.

SchemaPlay In a nutshell...

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Hmm...I can see that Abdar has developed a Transporting Scheme.

I will see if he enjoys transporting our waste bottles into the recycling bin - I will give him a cart and show him where to take them..

"Abdar...I have seen that you really like to transport things would you like to do some recycling..."

For Sharon, Abdar's transporting provided the opportunity for an Education for Sustainable Citizenship activity.

Abdar had a transporting scheme - he found every opportunity that he could to transport things around in his play.

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I can see that we can usefully build on these containing and enclosing schemes.

"The children enjoyed playing with the diorama...so we followed up on their interest in hedgehogs and the schemes by exploring habitats and creating a bug hotel."

"...I have seen that you really like to contain and enclose things - we can create a diorama to design the baby garden."

For Nicky at Tops, the Schemes applied by the children in their play provided an opportunity to involve them in the development of the 'Baby Garden'.

Tops Day Nurseries
Early Education and Care
Wareham in Dorset

Lucy and her friends really liked to contain and enclose things in their play - they made the most of every opportunity that they could find...

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Education for Sustainable Citizenship: Think children's future today!

FAIR SUSTAINABLE CITIZEN

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