



# Movement Environment Rating Scale (MOVERS) Mini-Workshop

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**16<sup>TH</sup> ANNUAL SUMMER INSTITUTE ON ECD**  
**OISE, UNIVERSITY OF TORONTO**



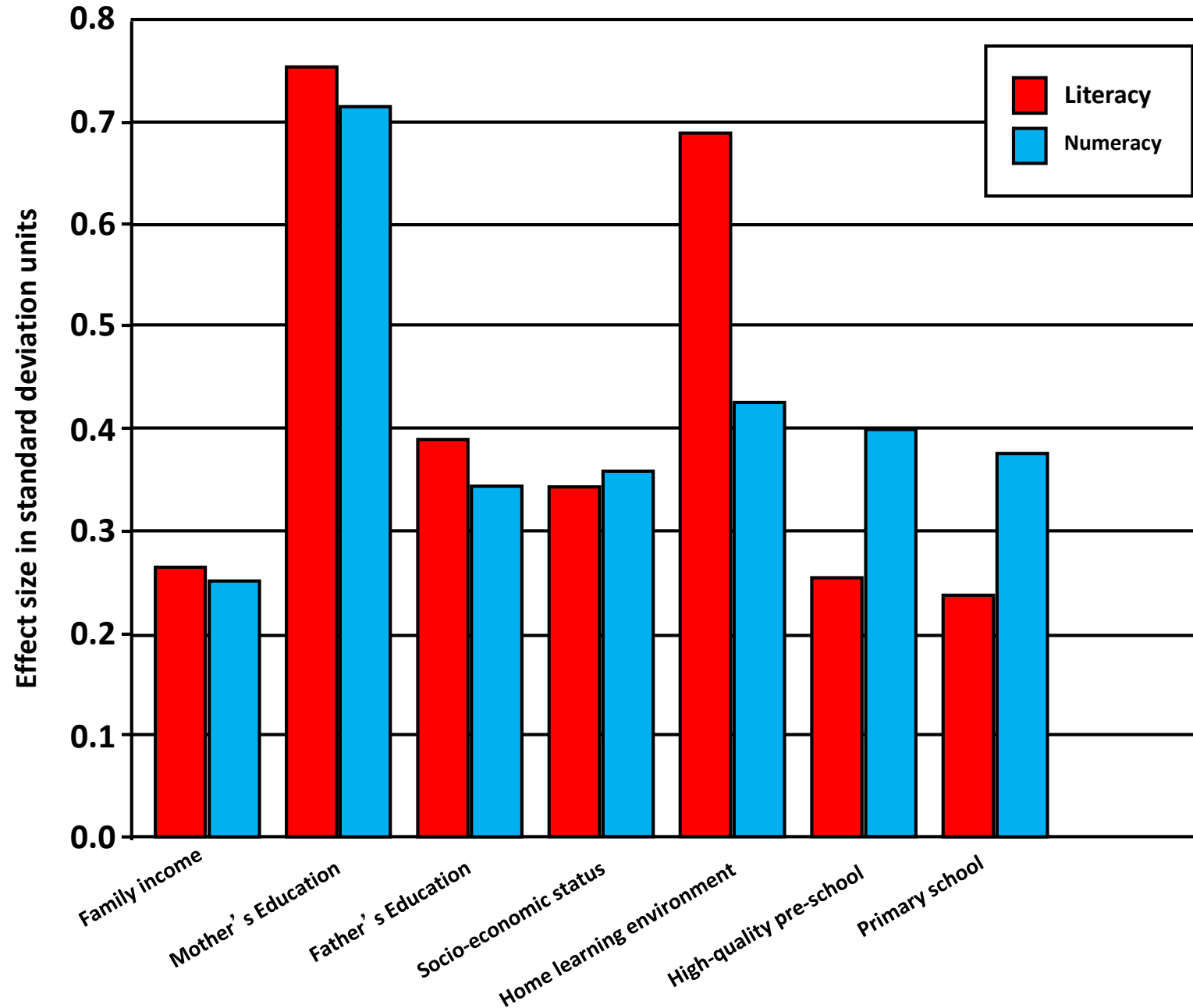
# Quality of ECEC settings

- *What does research tell us about the impact of quality on child learning outcomes?*

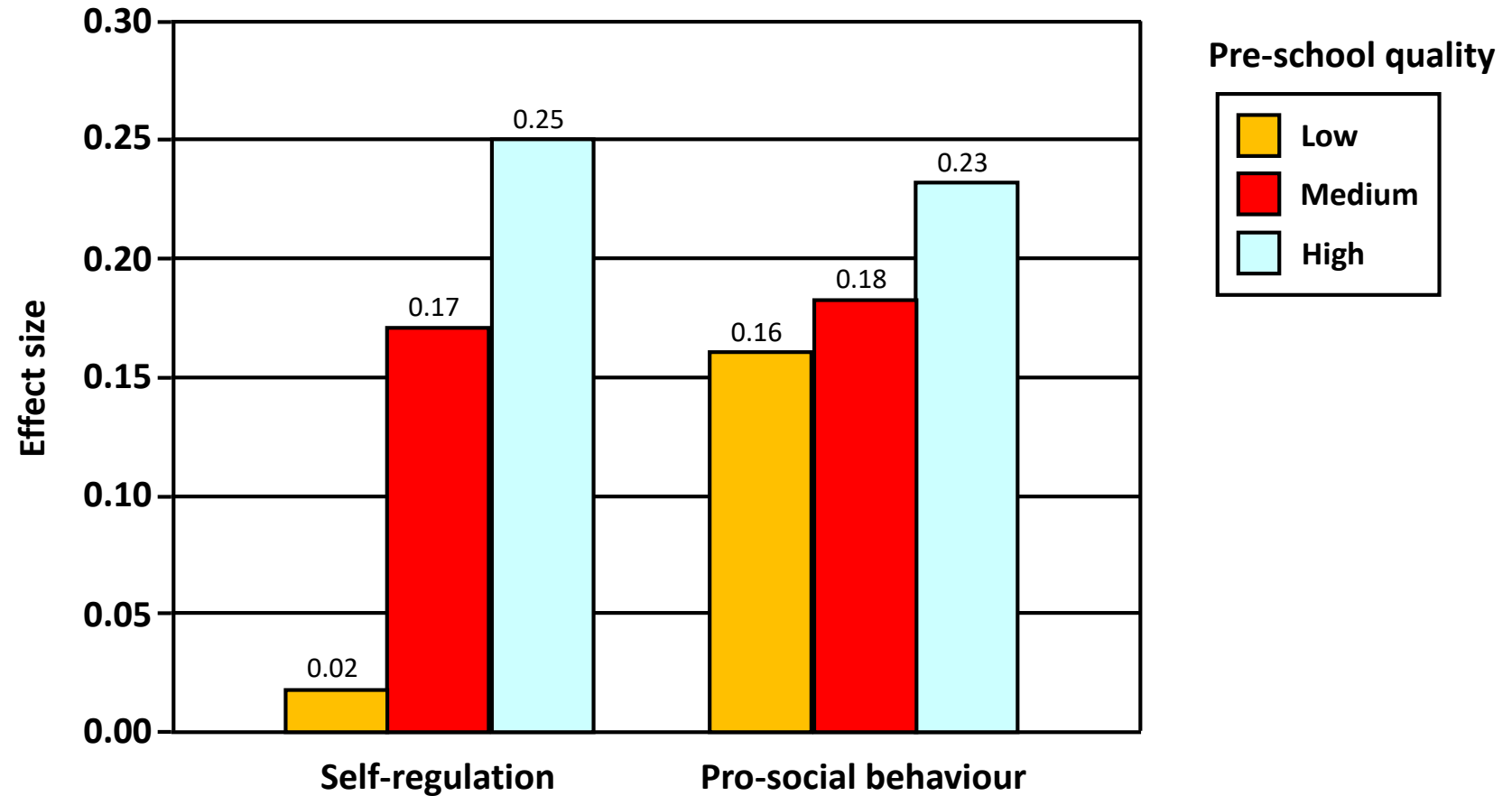
# EPPSE Study (1997-2014)

- To examine the impact of different types of pre, primary and secondary schooling on children's academic and social/behavioural development;
- To examine the structural and process characteristics of more effective pre, primary and secondary schools;
- To examine the interaction between child, family and home learning characteristics, quality and child outcomes;
- To examine the impact of students' views of themselves and of their school's process on academic and social/behavioural outcomes.

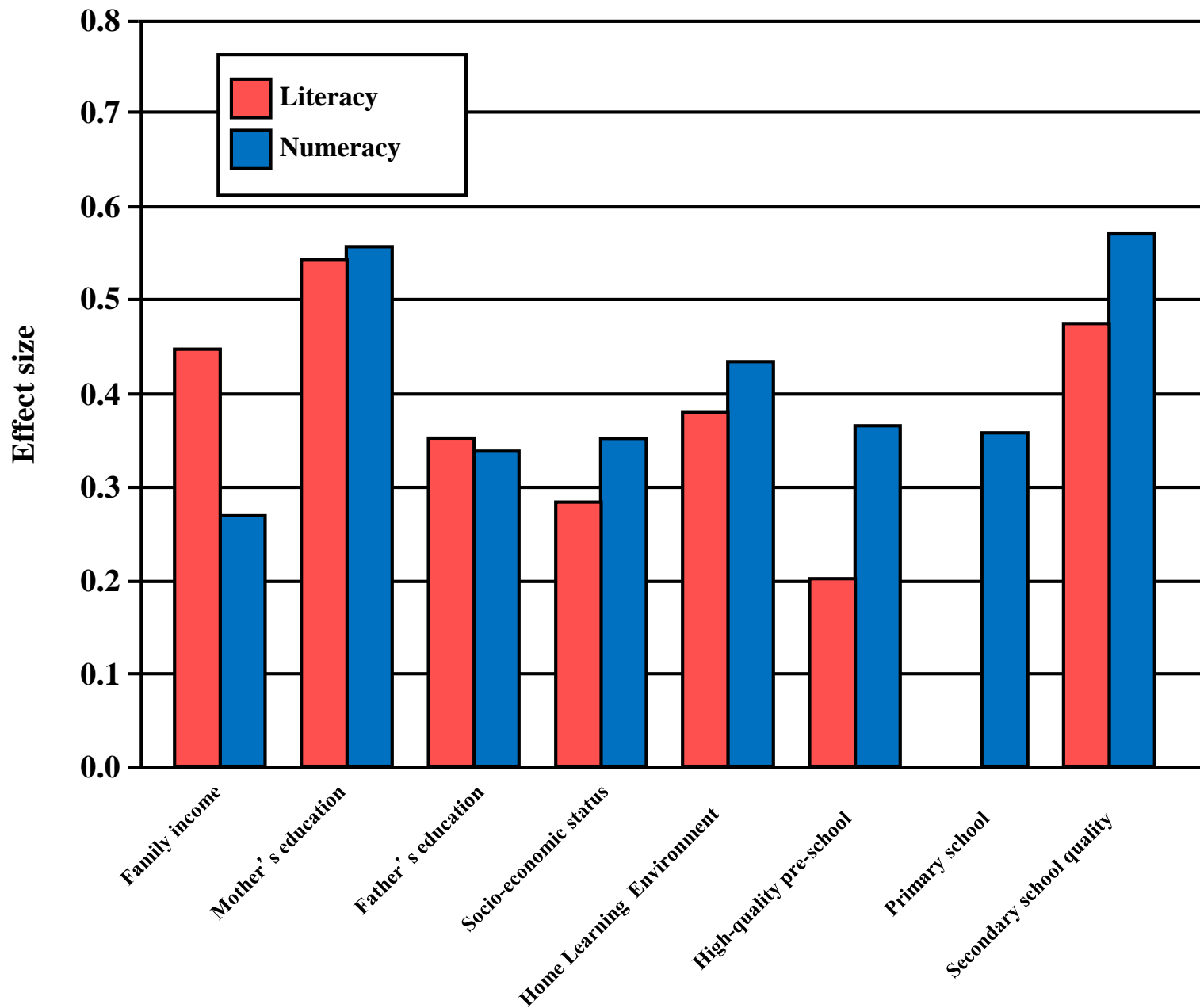
# Effects upon Age 11; literacy and numeracy



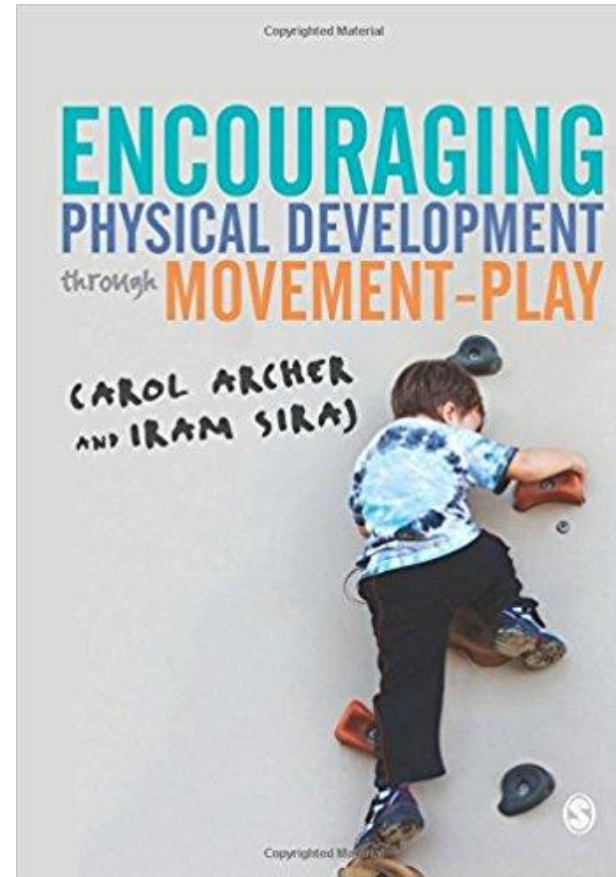
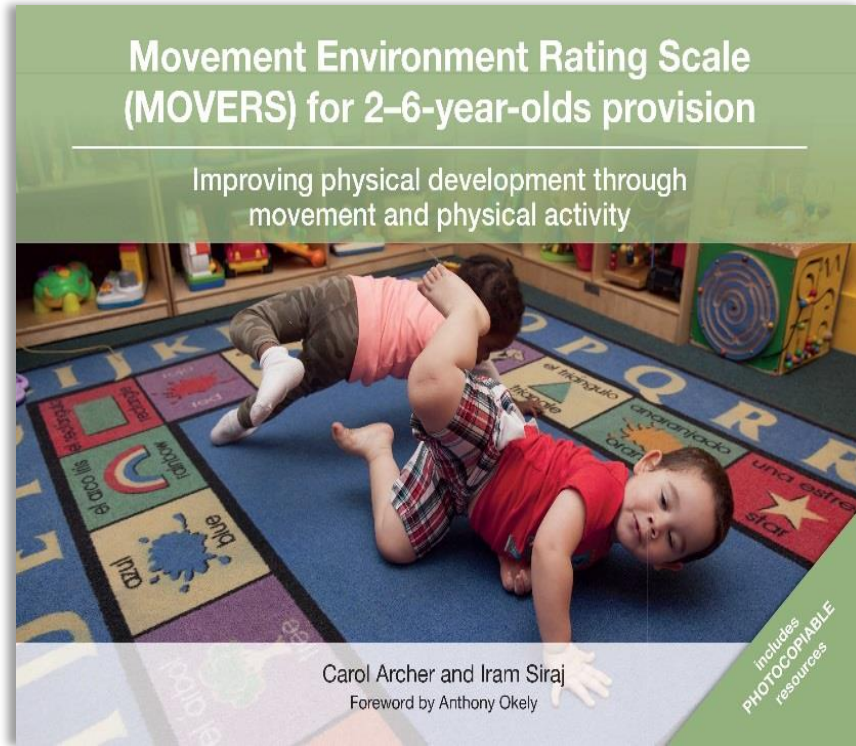
# Self-Regulation and Pro-Social Behaviour as a Function of Pre-School Quality (Age 11)



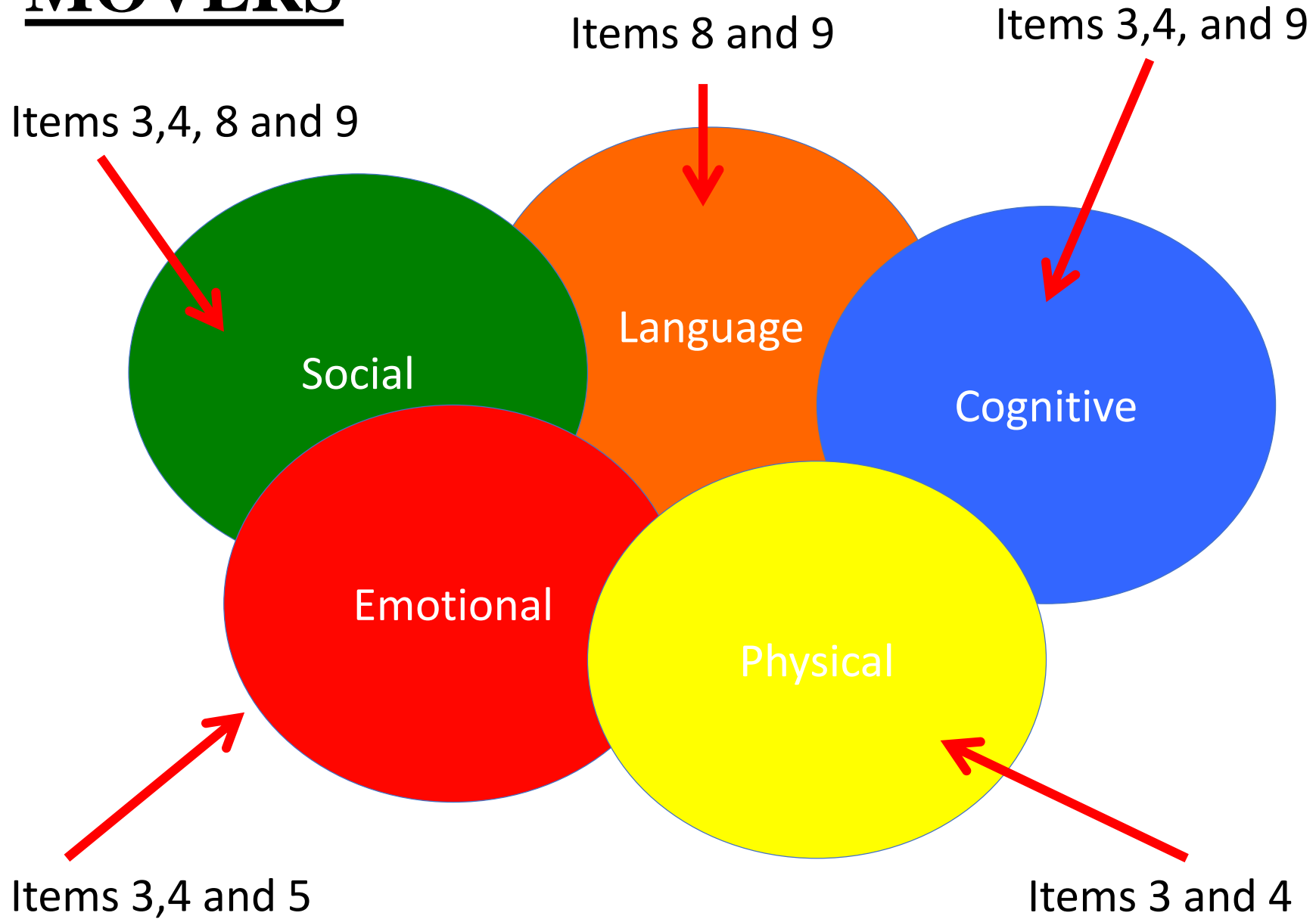
# Effect sizes for 16 year olds



# MOVERS

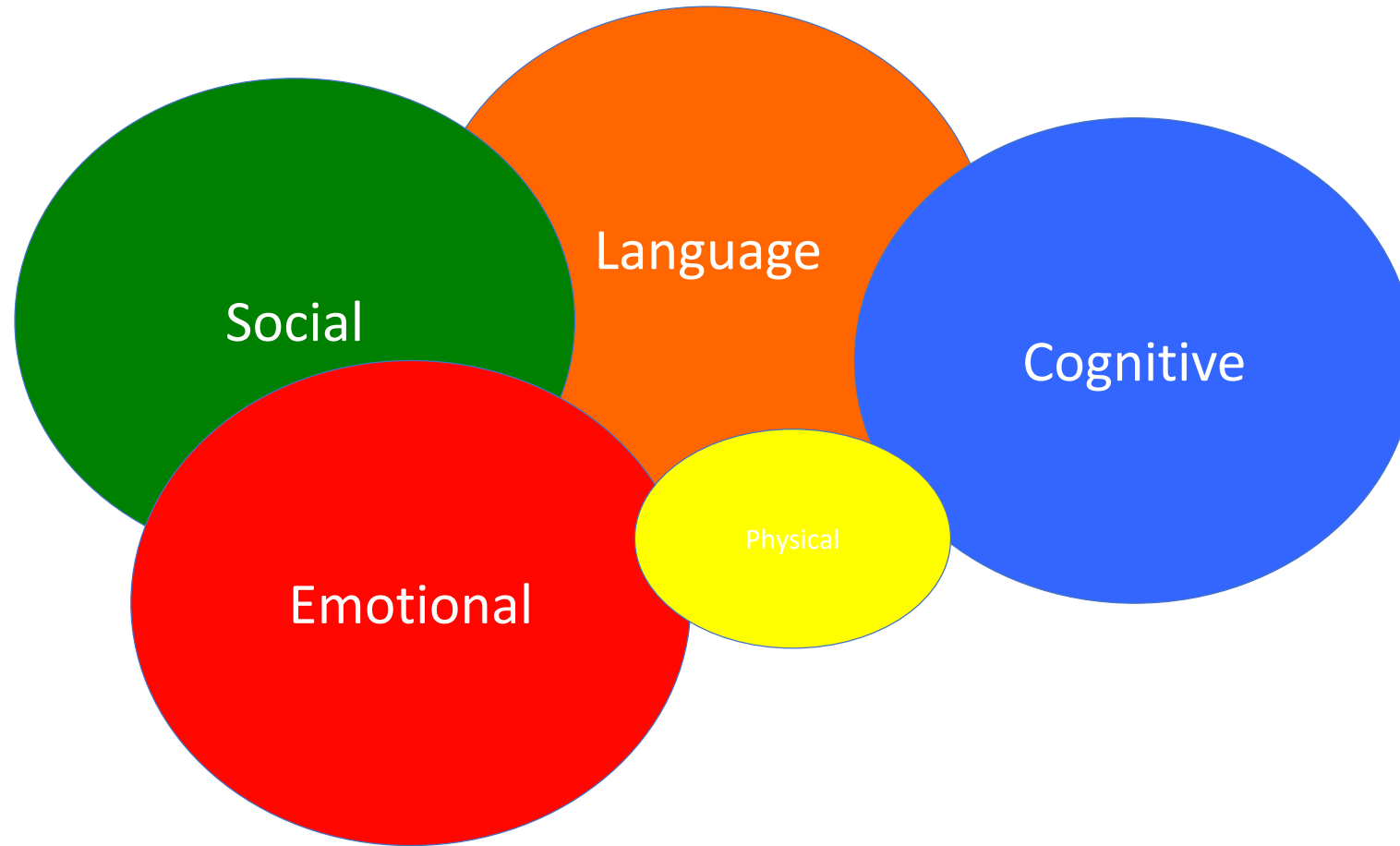


# MOVERS





# Domains of child development



# Physical Domain

## CHILD DEVELOPMENT

36 weeks  
gestation



Newborn



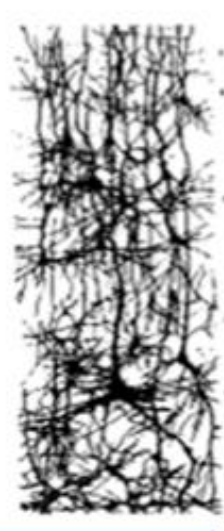
3 months



6 months



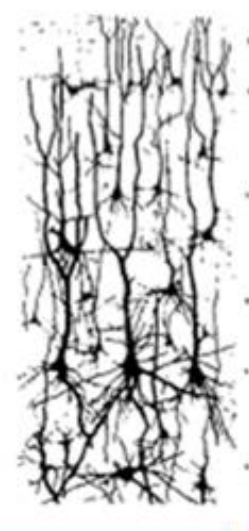
2 years



4 years



6 years



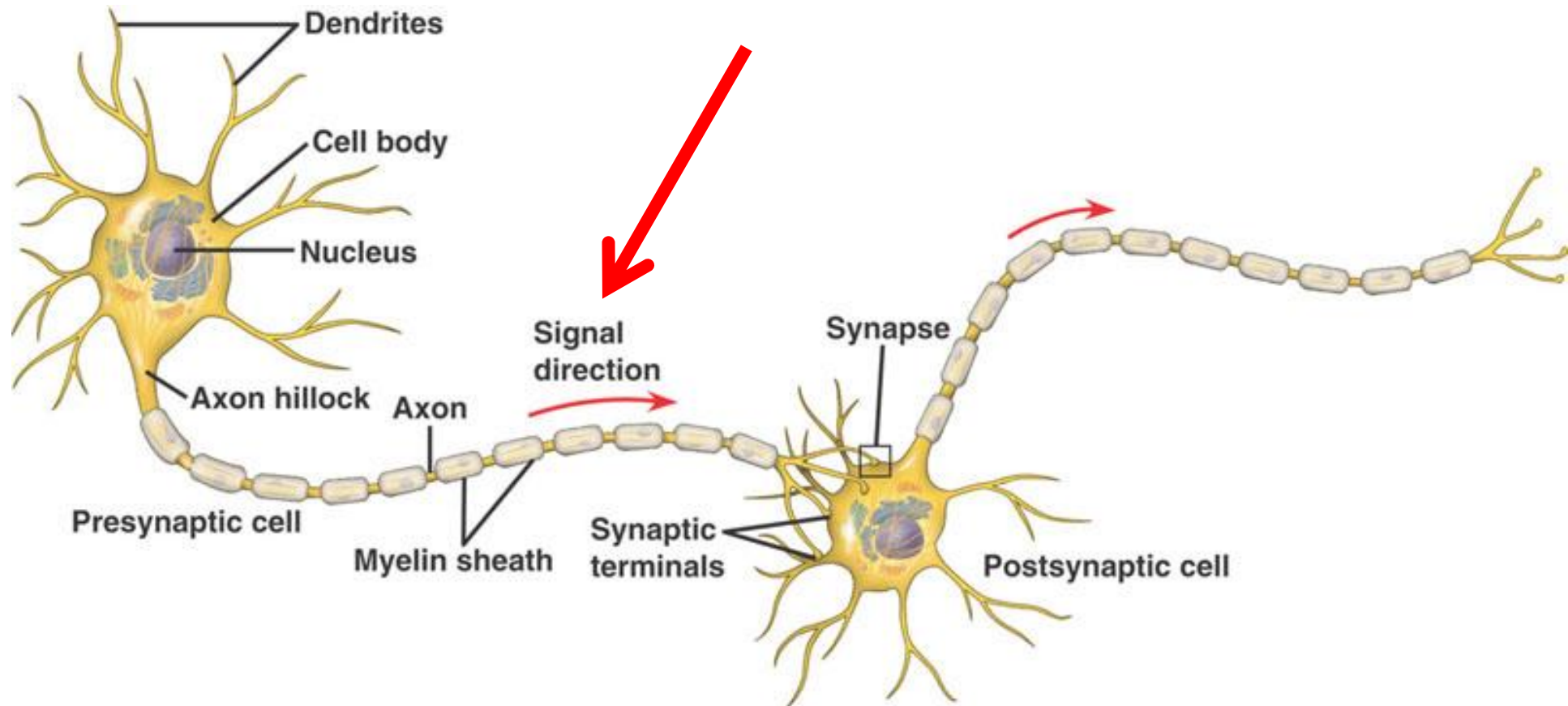
Synapse formation

Synapse pruning

# Physical Domain

## CHILD DEVELOPMENT

Preschool years – sensory and motor development



# Physical Domain

## CHILD DEVELOPMENT - VESTIBULAR



# Physical Domain

## CHILD DEVELOPMENT - PROPRIOCEPTION

- Supports body posture and movement
- Tell us where our bodies are in space
- Where body parts in relation to each other

# Physical Domain

## CHILD DEVELOPMENT - PROPRIOCEPTION

Upper Body & Lower Body	Upper Body
Put your left hand on your right toe.	• Clap your hands twice.
Put your left hand on your left toe.	• Put your elbows together.
Touch your heels.	• Touch your eyes.
Put your feet together.	• Touch one elbow.
Put your knees together.	• Touch two elbows.
Touch your right knee with your left hand.	• Draw a square in the air.
Touch your left knee with your right hand.	• Clap one time.
Touch one knee and one foot.	• Clasp your hands behind your neck.
Put your right hand on your left knee.	• Touch one shoulder.
Put your left hand on your right knee.	• Place your palms together.
Put your right hand on your left hip.	• Put your hands on your head.
Put your left hand on your right hip.	• Put your hands on your head.
Put your feet apart.	• Touch your nose.
Touch your toes with your arms crossed.	• Touch your nose with one hand, your knee with the other.
Put both hands on hips.	• Cross your arms in front of your chest.
Put your head to the floor.	• Put your nose to the window.



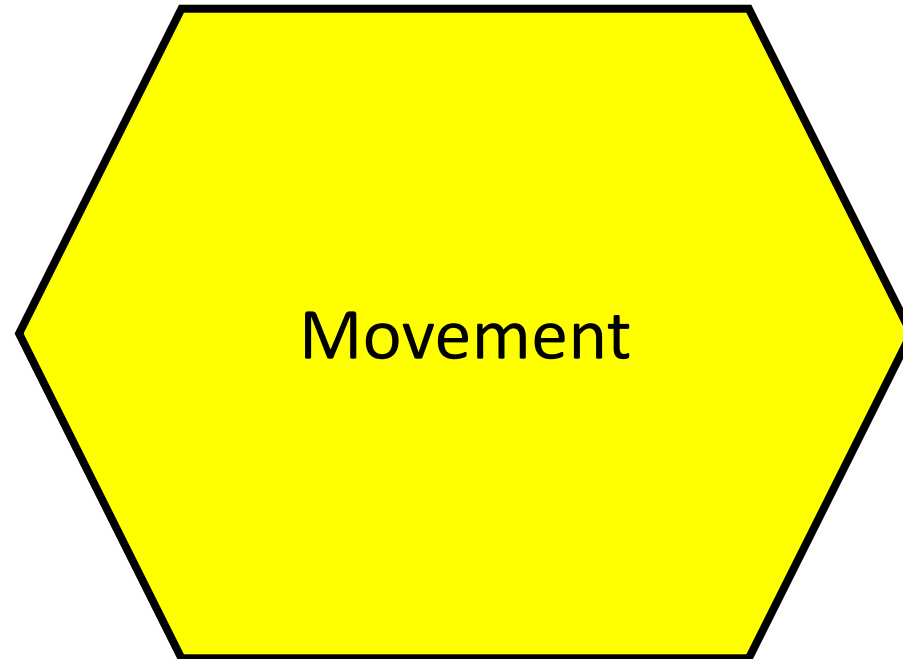
# Physical Domain

## CHILD DEVELOPMENT - PROPRIOCEPTION



# Physical Domain

## CHILD DEVELOPMENT





# Movement Environment Rating Scale (MOVERS) for 2–6-year-olds provision

Improving physical development through  
movement and physical activity



Carol Archer and Iram Siraj  
Foreword by Anthony Okely

includes  
**PHOTOCOPIABLE**  
resources

# MOVERS

## ITEM 2

*Providing resources including portable and or fixed equipment*

- Resources **indoors** and **outdoors**
- Access to **portable** and **fixed** equipment
- Organization of resources to **engage** children
- Creative ways to use equipment

# MOVERS

## ITEM 2

*5.4 Staff draw attention to creative ways in which resources and materials can be used and model their use and/or support children's explorations of how they can be utilised for physically activity play*

# MOVERS

## ITEM 2

*7.1 Staff provide a range of portable and fixed resources for gross motor activities, which encourage children to be physically active alone, or with their peers or adults*

# MOVERS

## ITEM 2

*7.3 Staff use resources for movement-play activities, which challenge and enhance all children's skills and physical development*

# MOVERS

## ITEM 2 – TAKE HOME MESSAGES

- Quality not quantity
- Indoor and outdoor environments are important
- Both portable and fixed equipment are needed
- The role of the educator in providing opportunities is important

*1. What resources are available in your setting?*

*2. How could the resources be changed or modified?*

# MOVERS

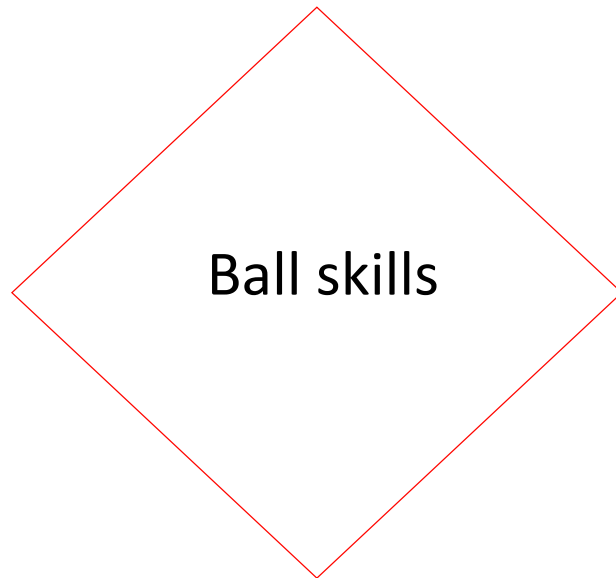
## ITEM 3

### *Gross motor skills*

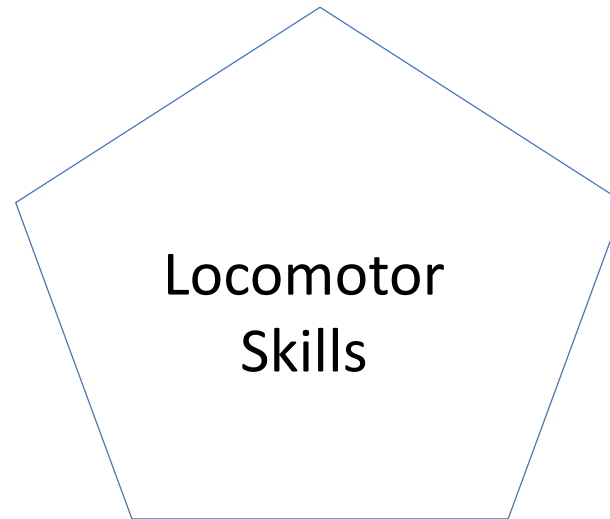
- Children **engage** in gross motor activities indoors and outdoors
- **Integration** of gross motor activities into other curriculum areas
- Staff **plan** for gross motor activities

# MOVERS

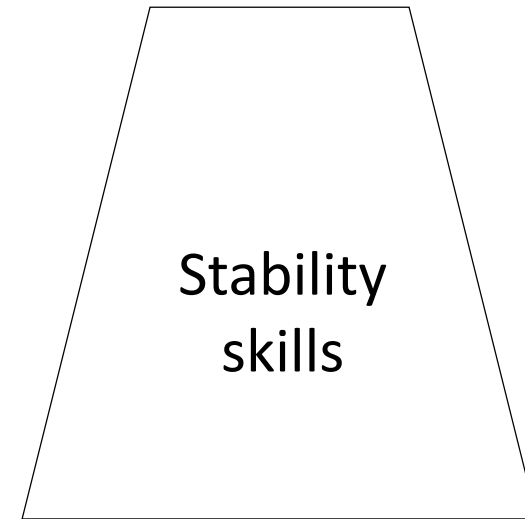
## ITEM 3 – GROSS MOTOR SKILLS



Catch, kick, throw, strike,  
roll, bounce



Run, jump, leap, gallop,  
side gallop, hop



Balance



# MOVERS

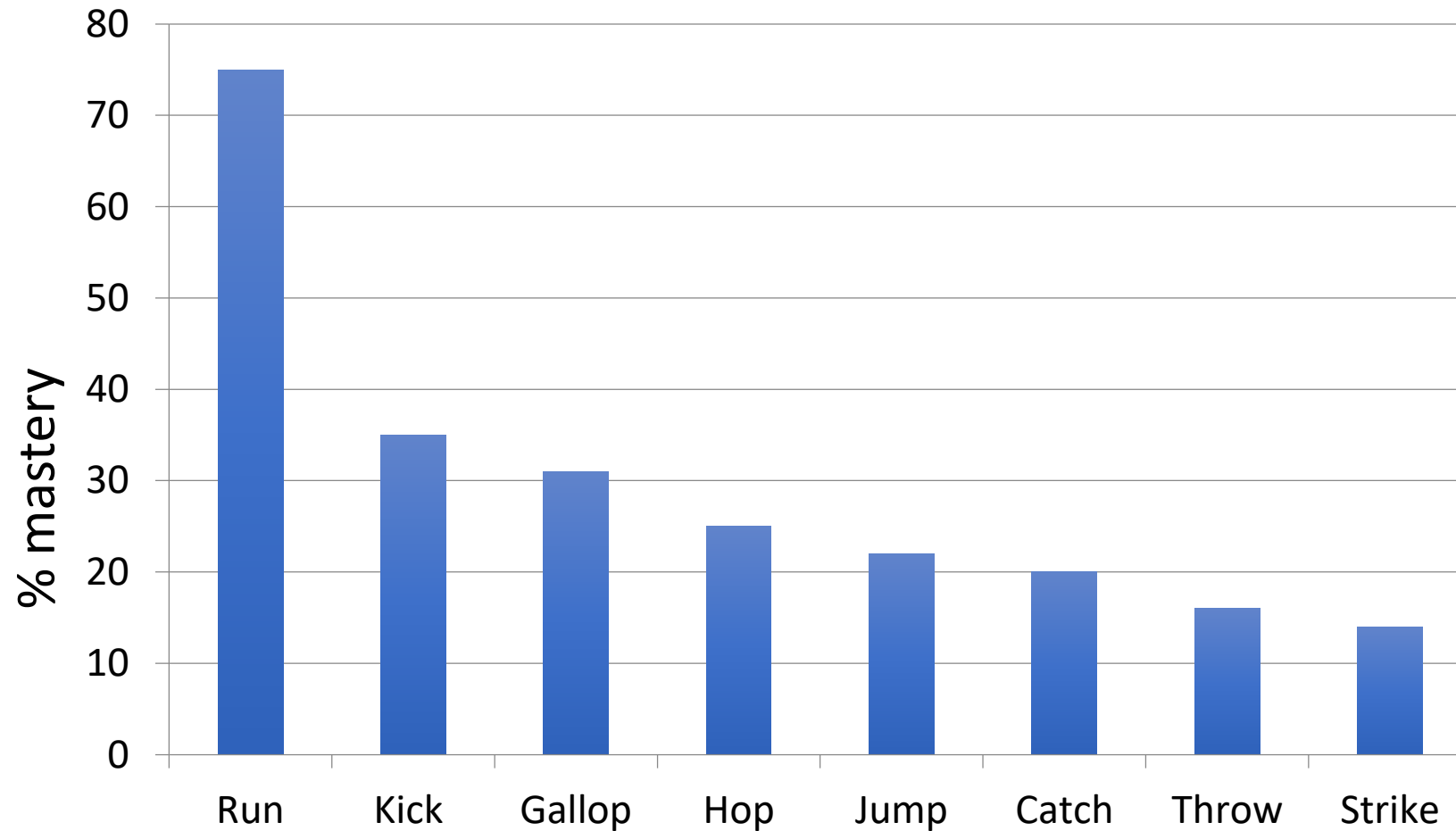
## ITEM 3 – GROSS MOTOR SKILLS

Why are they important?

- Self esteem
- Weight status
- Levels of physical activity
- Cardio respiratory fitness
- Cognition and self-regulation

# MOVERS

## ITEM 3 – GROSS MOTOR SKILLS

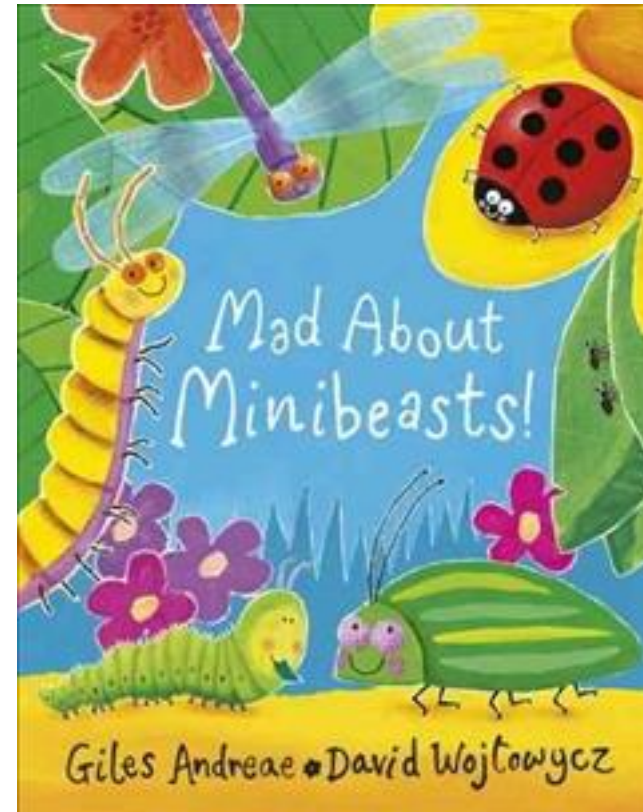


# MOVERS

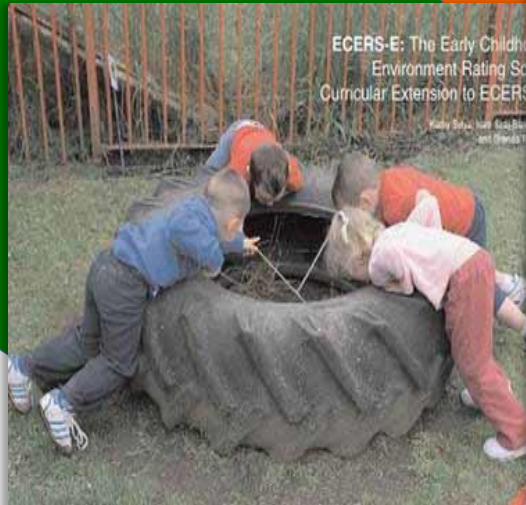
## ITEM 3

*5.2 Staff integrate gross motor activities into other curriculum areas*

The dragonfly can move *forwards, backwards, sideways and hover.* While doing these movements, dragonflies rotate their four wings independent of each other.



Research



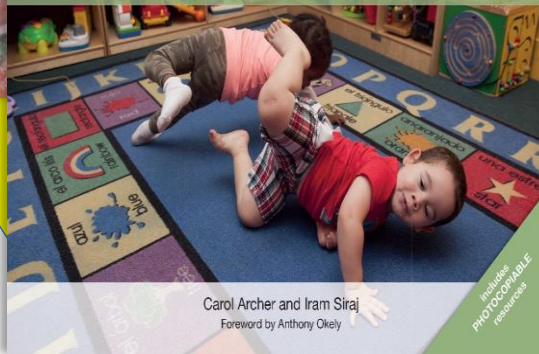
Assessing Quality in  
EARLY CHILDHOOD EDUCATION AND CARE

Sustained Shared Thinking and Emotional Well-being  
(SSTEWS) Scale for 2-5-year-olds provision



Movement Environment Rating Scale  
(MOVERS) for 2-6-year-olds provision

Improving physical development through  
movement and physical activity



Audit and  
regulation

Self evaluation  
and  
improvement

# MOVERS

## Subscale 1

Curriculum  
environment  
and  
resources for  
physical  
development

## Subscale 2

Pedagogy for  
physical  
development

## Subscale 3

Supporting  
physical  
activity and  
critical  
thinking

## Subscale 4

Parents/car  
ers and  
staff

# THE MOVERS: Subscales and Items

## ***Subscale 1: Curriculum, environment and resources for physical development***

Item 1: Arranging environmental space to promote physical activity

Item 2: Providing resources including portable and/or fixed equipment

Item 3: Gross motor skills

Item 4: Body movement to support fine motor skills

## ***Subscale 2: Pedagogy for physical development***

Item 5: Staff engaging in movement with children indoors and outdoors

Item 6: Observation and assessment of children's physical development

Item 7: Planning for physical development indoors and outdoors

## ***Subscale 3: Supporting physical activity and critical thinking***

Item 8: Supporting and extending children's movement vocabulary

Item 9: Encouraging shared sustained thinking by communicating and interacting through physical activity

Item 10: Supporting children's curiosity and problem solving

## ***Subscale 4: Parents/carers and staff***

Item 11: Staff inform families about children's physical development and the benefits to their learning, development and health

# Improving physical development through movement and physical activity & the MOVERS

Physical development is a key component of the curriculum internationally

- Learning for the young child is grounded in the body, particularly in the first 6 to 8 years of life when the growth of the brain is dependent upon children working hard at stimulating the nervous system (Lamont, 2007).
- There is increasing concern about whether children are physically ready for school in terms of their balance, posture, and coordination. These are the physical foundations for learning that need to be secure in order to ensure young children are equipped to cope with the demands of the more formal classroom; they include the ability to sit still and concentrate, coordinate their hand and eye movements when writing and eye tracking skills needed for reading and fine motor skills (Goddard Blythe, 2005)

# MOVERS

## SCORING

- Each subscales is divided into a number of items
- Each item is scored on a scale of 1-7
- Each subscale is given a final score

Scale of measurement:

Inadequate		Minimal		Good		Excellent
1	2	3	4	5	6	7



# MOVERS

## SCORING

- **1= don't have it** (few or no resources or activities)
- **3=have it** (limited but appropriate resources, basic activities provided, but pedagogy seems 'accidental' or lacks coherence)
- **5=have it and use it** (a wider range of materials plus active support by staff to support learning)
- **7=have it, use it and extend it** (diverse range of materials to suit different needs/interests **plus** encouragement to apply knowledge to other situations and problems. At this level, both adults and children contribute to construction of shared meaning, knowledge and skills)

# MOVERS

## SCORING

- 1 = if any indicator under 1 is scored **YES**
- 2 = *all indicators under 1 are scored **NO** and at least half of the indicators under 3 are scored **YES***
- 3 = all indicators under 1 are scored **NO** and all indicators under 3 are scored **YES**
- 4 = *all indicators under 1 are scored **NO** and all indicators under 3 are scored **YES** and at least half of the indicators under 5 are scored **YES***
- 5 = all indicators under 1 are scored **NO** and all indicators under 3 are scored **YES** and all indicators under 5 are scored **YES**

# MOVERS

## SCORING

- *6 = all indicators under 1 are scored **NO** and all indicators under 3 are scored **YES** and all indicators under 5 are scored **YES** and least half of the indicators under 7 are scored **YES***
- *7= all indicators under 1 are scored **NO** and all indicators under 3 are scored **YES** and all indicators under 5 are scored **YES** and and all indicators under 7 are scored **YES**,*
- *NA (not applicable) can only be given for indicators which are labelled ‘NA’. Items marked NA are not counted when determining the rating for the item.*

# MOVERS

## SCORING

- **Average** score for the **sub-scale** - add up all of the ratings for the individual items and then divide by the number of items scored.
- The **total** mean score for the **MOVERS** is the sum of all of the item ratings divided by the total number of items scored.

# MOVERS

## ITEMS 6 and 7



- *What observations can you make about the scale?*
- *What happens in terms of the child?*
- *What happens in terms of the educator?*

# MOVERS

## SCRAMBLED ACTIVITIES



**Subscale 1** Item 1 Arranging environmental space to promote physical activity (Pink)

**Subscale 2** Item 5 Staff engaging in movement with children indoors and outdoors (Yellow)

**Subscale 3** Item 8 Supporting and extending children's movement vocabulary (Green or Purple)

**Subscale 4** Item 11 Staff inform families about children's physical development and the benefits to learning, development and health

\*\* (Light blue)

# Domains of child development

