



*Improving Learning*

Australian Council *for* Educational Research



# Measuring social and emotional skills to support children's growth

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# What are Future Skills anyway?

- What do we agree on?
  - Includes both hard and soft skills
    - Problem solving
    - Interpersonal skills
  - Lifelong learning
    - From childhood through to adult
  - Changeable/modifiable
    - A role for educators
    - A role for ECEC!

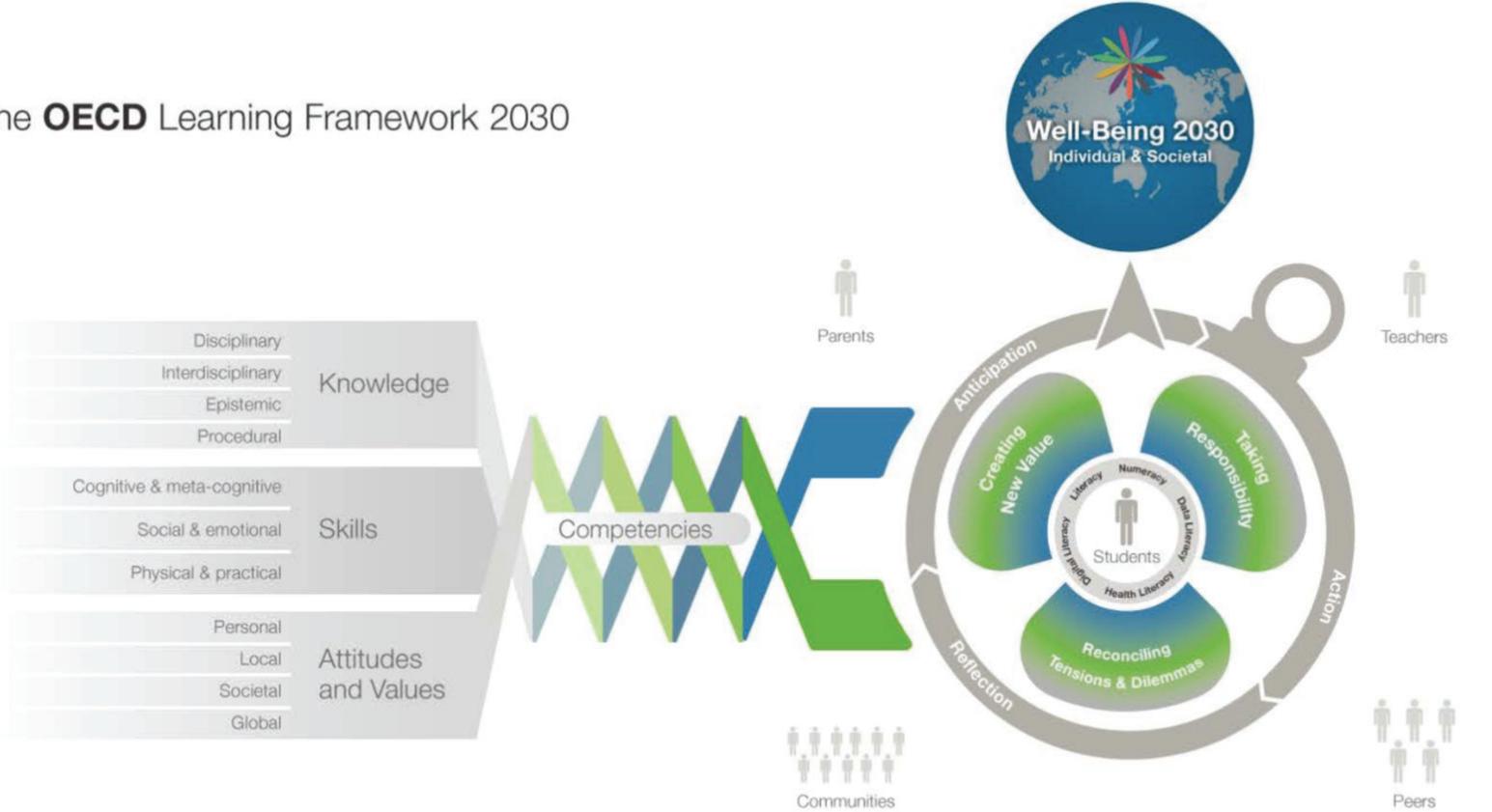


# What are Future Skills anyway?

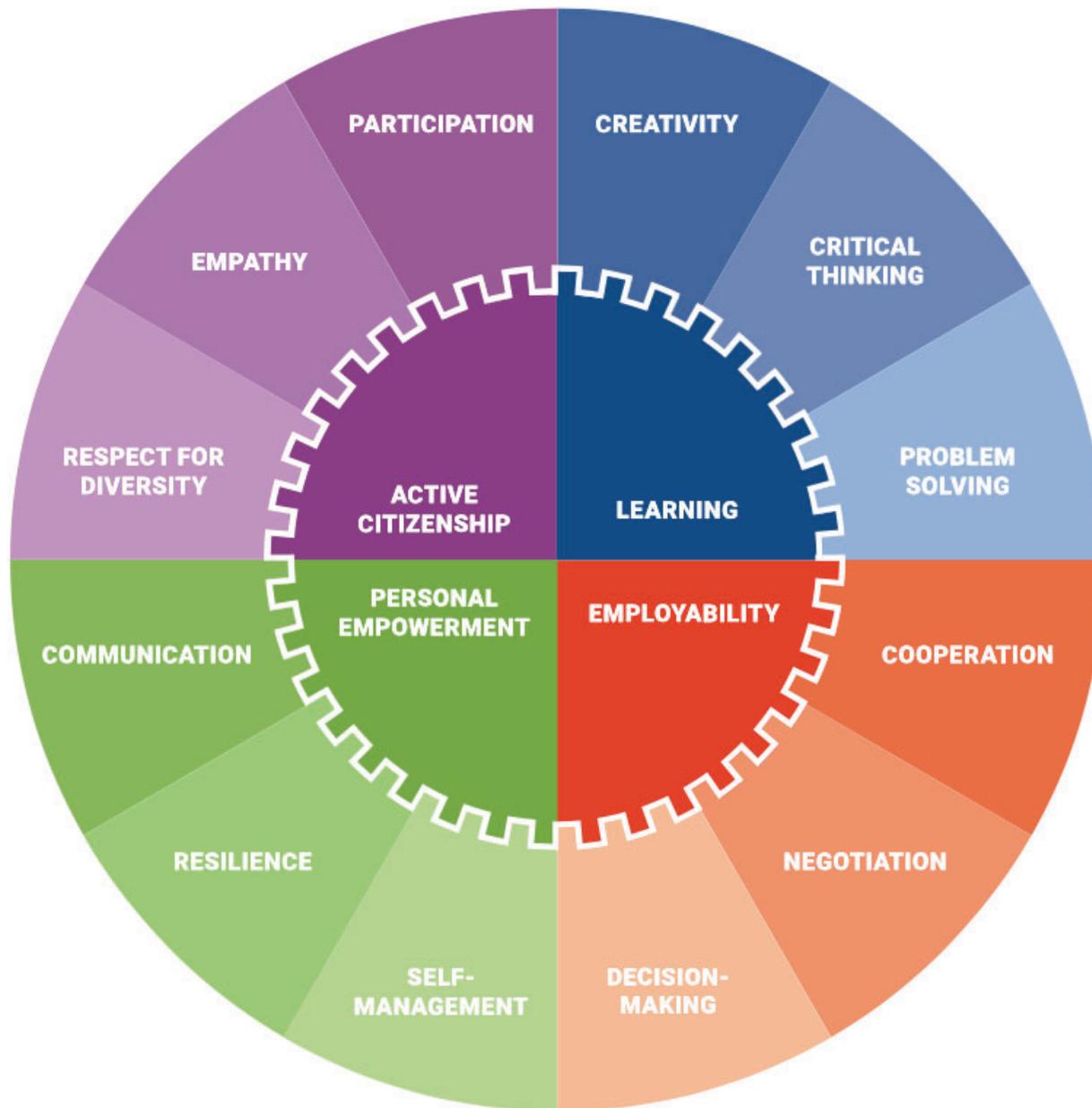
- What do we *not* agree on?
  - A name
    - 21st century skills
    - Transversal skills
    - Transferable skills
    - Competencies
    - ...
  - A set of skills
    - Many frameworks
    - All include some set of social and emotional skills



# The **OECD** Learning Framework 2030



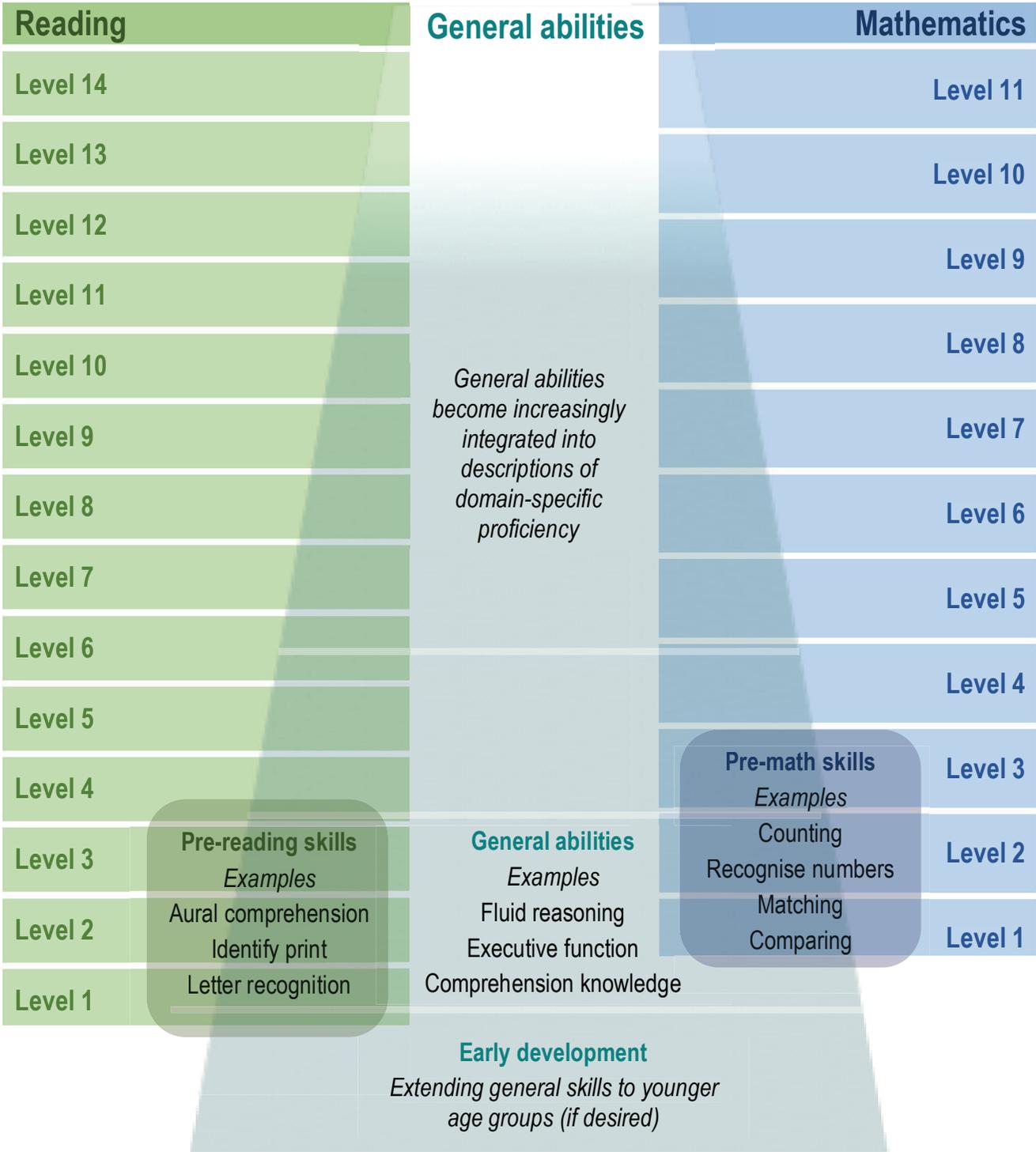
# THE TWELVE CORE LIFE SKILLS





# Why do we care about social and emotional skills?

- Important in their own right
  - A core part of 21C skills frameworks
  - Ability to function in a social world
  - Increasingly important in a globalised world
- SE skills *cause* gains in other domains
  - New Australian evidence shows ES 0.3 SD for SE skills (age 5) on NAPLAN scores (age 8)
  - <https://doi.org/10.3102/0013189X19848724>





# So, what are social and emotional skills?

- Social Interaction
  - The capacity to relate to and establish relationships with others
- Social Responsibility
  - The capacity to function within the school environment and interact with groups of others in socially prescribed ways
- Transcending Social Difficulties
  - Social self-regulation and social problem-solving capacities
- Other frameworks exist, eg, Collaborative for Academic, Social, and Emotional Learning (CASEL):

# So, what are social and emotional skills (CASEL 5)?

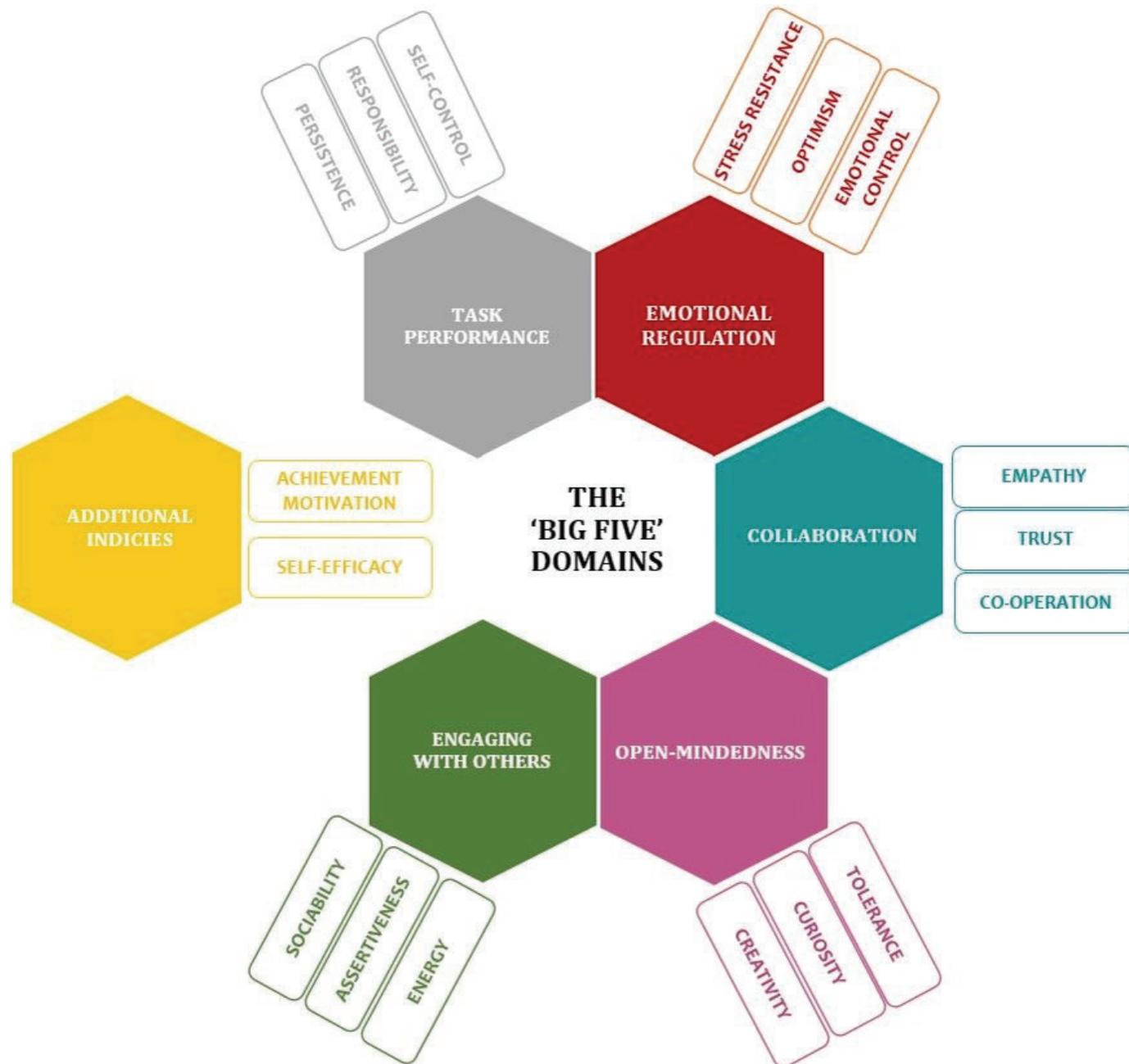


- Self-Awareness
  - recognise personal strengths and limitations
  - have well-grounded confidence and optimism.
- Self-Management
  - regulate emotions, thoughts, and behaviours
    - Both self regulation and goal setting
- Social Awareness
  - perspective taking and empathy
  - understand social and ethical norms

# So, what are social and emotional skills (CASEL 5)?



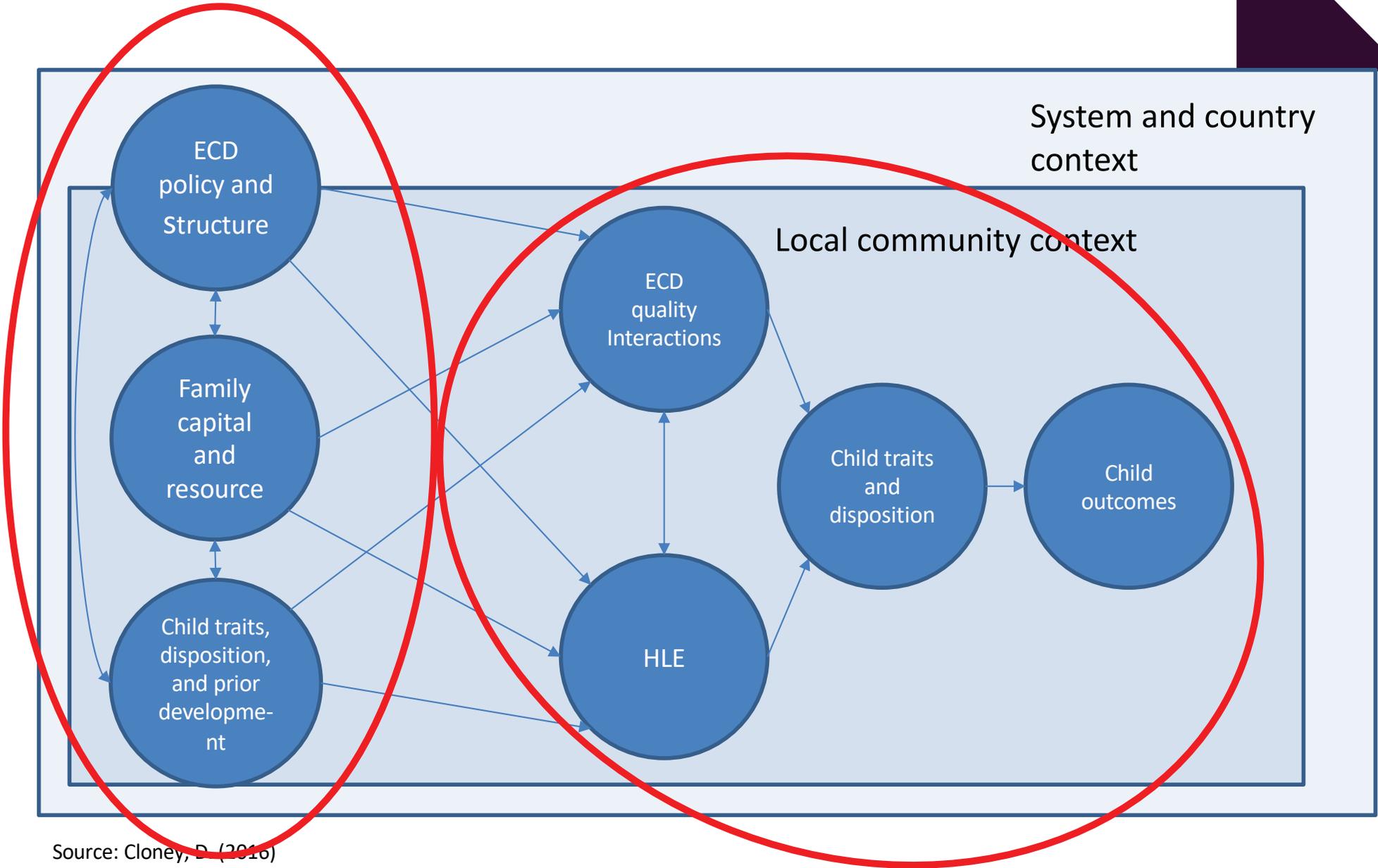
- Relationship Skills
  - maintain healthy relationships
  - communicating clearly, listening actively, cooperating, resisting inappropriate social pressure, negotiating conflict constructively
- Responsible Decision-Making Skills
  - Making choices based on considerations of ethical standards, safety, social norms, consequences, and the well-being of self and others.





# ECEC and SE skills

- *Play is essential to stimulate and integrate a wide range of children's intellectual, physical, social and creative abilities. (VEYLDF)*
- **OUTCOME 1: IDENTITY**
  - ...feeling included and secure in the social settings that are part of everyday life.
- **OUTCOME 2: CONNECTED WITH AND CONTRIBUTE TO THEIR WORLD**
  - being in groups and contributing to family and social life
- **OUTCOME 3: STRONG SENSE OF WELLBEING**
  - develop a range of social skills and dispositions.
- **OUTCOME 4: CONFIDENT AND INVOLVED LEARNERS**
  - <http://bit.ly/outcome4>
  - contribute positively and effectively to other children's learning.
- **OUTCOME 5: CHILDREN ARE EFFECTIVE COMMUNICATORS**
  - innately social, creative and motivated to exchange ideas, thoughts, questions and feelings.



Source: Cloney, D. (2016)

# Classroom Assessment Scoring System



- CLASS is A measure of process quality
  - *Teaching through interactions*
  - *Applicable in multiple contexts*
  - *Not reliant on particular curriculum or content*

## Emotional Support

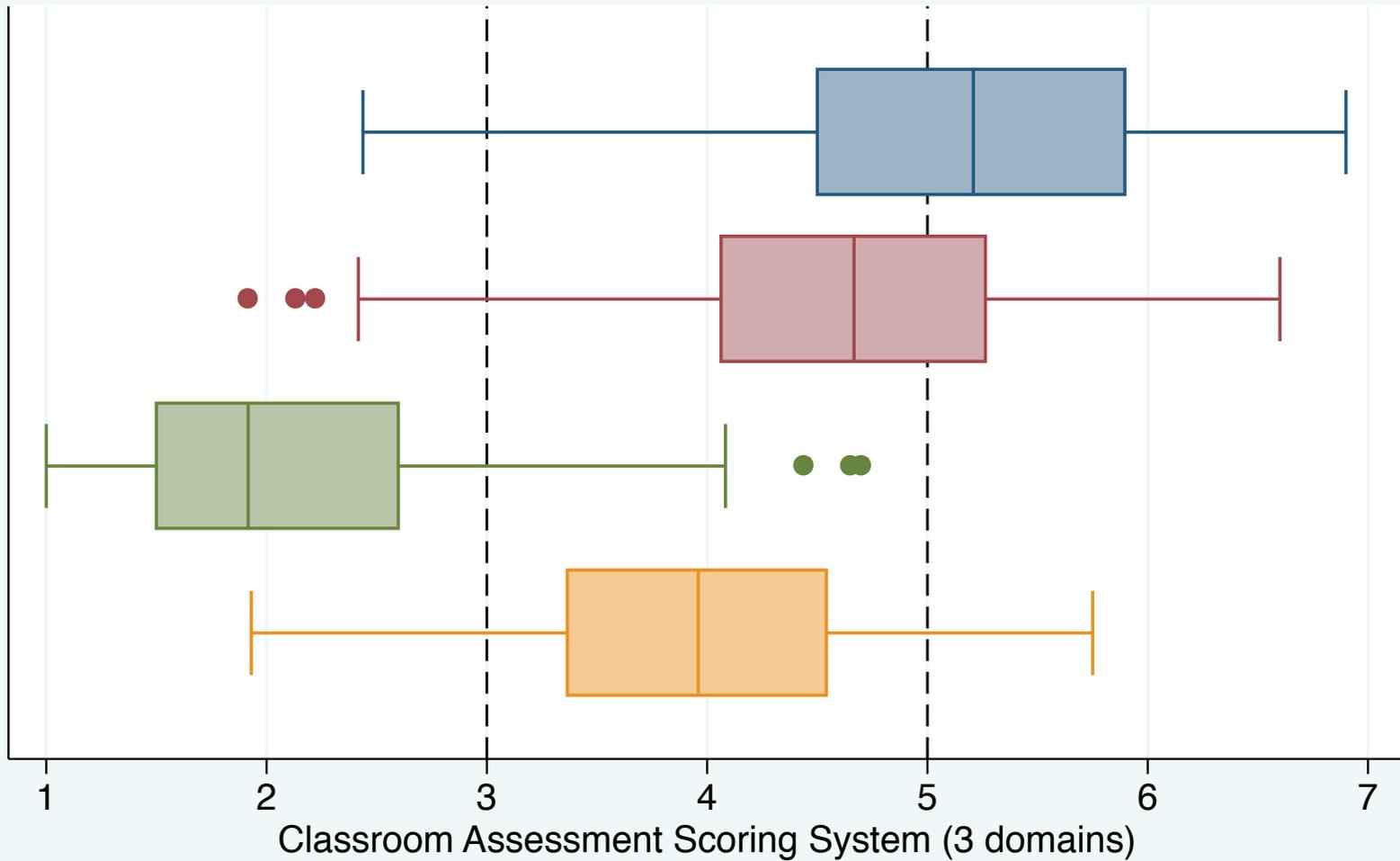
1. Positive Climate
2. Negative Climate
3. Teacher Sensitivity
4. Regard for Child Perspectives

## Classroom Organization

5. Behavior Management
6. Productivity
7. Instructional Learning Formats

## Instructional Support

8. Concept Development
9. Quality of Feedback
10. Language Modeling



Source: Tayler, C., Ishimine, K., Cloney, D., Cleveland, G., & Thorpe, K. (2013). The quality of early childhood education and care services in Australia. *Australasian Journal of Early Childhood*, 38 (2), 13-21.



# Describing children's SE learning

- How can educators measure SE skills and ability?
- See <http://bit.ly/outcome4>
- Example measures
  - SDQ, SSIS, MELQO, Early ABLES
  - see also EEF database [http://bit.ly/ref\\_ec\\_measures](http://bit.ly/ref_ec_measures)



# SDQ

- Three similar forms
  - 2-4 years (parent- and educator-rated)
  - 4-10 years (parent- and educator-rated)
  - 11-17 years (self-rated)
- 3-5 dimensions
  - Internalizing (emotional symptoms + peer relationship problems) 5 + 5 items
  - Externalizing (conduct/behavioural problems + hyperactivity) 5 + 5 items
  - Prosocial behaviour 5 items

# SDQ



## **Conduct problems Scale**

ITEM 5: Often has temper tantrums or hot tempers (*I get very angry*)

ITEM 7: Generally obedient... (*I usually do as I am told*)

ITEM 12: Often fights with other children... (*I fight a lot*)

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ITEM 18: Often lies or cheats (*I am often accused of lying or cheating*)

ITEM 22: Steals from home, school or elsewhere (*I take things that are not mine*)

## **Hyperactivity scale**

ITEM 2: Restless, overactive... (*I am restless...*)

ITEM 10: Constantly fidgeting or squirming (*I am constantly fidgeting....*)

ITEM 15: Easily distracted, concentration wanders (*I am easily distracted*)

---

ITEM 21: Thinks things out before acting (*I think before I do things*)

ITEM 25: Sees tasks through to the end... (*I finish the work I am doing*)

# SDQ



	<b>Not True</b>	<b>Somewhat True</b>	<b>Certainly True</b>
Considerate of other people's feelings	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Restless, overactive, cannot stay still for long	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Often complains of headaches, stomach-aches or sickness	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Shares readily with other children, for example toys, treats, pencils	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Often loses temper	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Rather solitary, prefers to play alone	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Generally well behaved, usually does what adults request	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Many worries or often seems worried	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



# SSIS

- Current version: SSIS SEL Screening and Progress Monitoring Scales
- Single, multi-rater version
  - 4-14 years (parent- and educator-rated)
- 5 SE dimensions + 1 motivation + 2 academic competence
  - CASEL 5
    - Self-Awareness (8 items)
    - Self-Management (15 items)
    - Social Awareness (7 items)
    - Relationship Skills (13 items)
    - Responsible Decision-Making Skills (8 items)



# SSIS SEL

- **Self-Management**

- Uses appropriate language when upset
- Completes tasks without bothering others.
- Follows your directions.
- Says when there is a problem.
- Has temper tantrums.
- Follows classroom rules.
- Responds appropriately when pushed or hit.
- ...

Never (0), Seldom (1), Often (2), and Almost Always (3)



# SSIS SEL

- **Social Awareness**
  - Tries to comfort others.
  - Feels bad when others are sad.
  - Shows kindness to others when they are upset.
  - Forgives others.
  - Is nice to others when they are feeling bad.
  - Shows concern for others.
  - Stands up for others who are treated unfairly.

Never (0), Seldom (1), Often (2), and Almost Always (3)

<https://www.pearsonassessments.com/>



# MELQO

- Single, direct observation version
  - 3-6 years
- Open source tool developed to support SDG 4.2
- 2 SE dimensions + literacy, numeracy, executive function
  - Perspective-Taking/Empathy (3 items)
  - Understanding Feelings (2 items)



<http://ecdmeasure.org>



# MELQO

21b	<b>Say: What would you do to help her feel better?</b> Has one idea to make child feel better (e.g., give a hug, find someone to help, offer toy; help child get up; say something nice; say sorry) This solution should seem reasonable to the tester based on cultural norms	Write in response:			
21c	Prompt ONCE by <b>saying, Is there anything else you would do? Has second idea to make child feel better</b> (e.g., give a hug, find someone to help, offer toy; help child get up; say something nice; say sorry)	Write in response:			

# MELQO



#22 Understanding Feelings					
<i>Materials:</i> None					
<i>STOP RULES:</i> None					
	<i>Instructions</i>	Correct Answer	Appropriate Response (1)	Inappropriate response (0)	Child says I don't know/ no response (99)
22a	Say: <b>Now I'm going to ask you another question. Please tell me what makes you feel unhappy?</b>	Names at least one reason for feeling sad (e.g., loses toy; gets hurt; fight with other child)			



# Early ABLES

- Single form
  - 2-5 years (educator-rated)
  - Specifically for children with additional needs
  - Validation data up to 18 years
- Validated and scaled using contemporary measurement theory (e.g., IRT)
- 1 SE dimension + speaking and listening, and reading



# Early ABLES

- Example item from earlier study

3. Using conversational skills	Option
The pupil does not typically display skills/behaviours at a beginning level	0
Focuses attention on a communicative partner, but does not converse	1
Contributes to the conversation only when prompted (e.g., answers the questions of others)	2
Uses information supplied by others to maintain the flow of conversation (e.g., asks questions relevant to the current conversational topic)	3
Draws on shared knowledge or knowledge about his/her partner to initiate and/or maintain a conversation	4
Adjusts communication style and/or content to suit context and social expectations	5

<https://www.education.vic.gov.au/school/teachers/learningneeds/Pages/ablesassessment.aspx>

<http://www.arc-ots.com/earlyABLES/>

# Study I

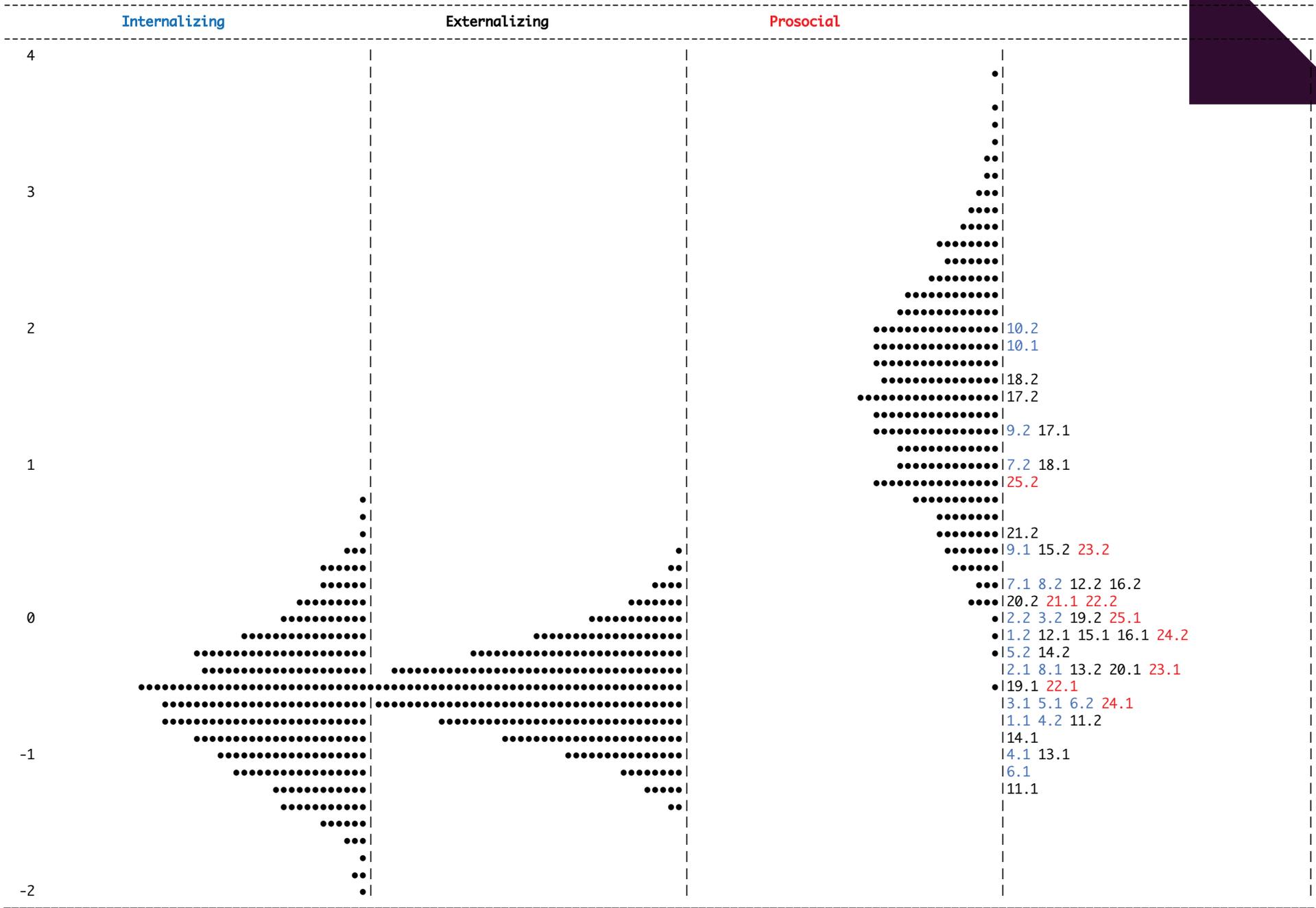
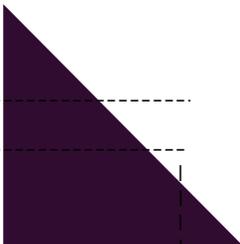
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# Study I

- Good fit to IPL partial credit model
- Reliability lower than in other published studies ( $>0.7$ )
  - Internalizing 0.638, Externalising 0.610, Prosocial 0.456
  - Reliability  $\neq$  reliability (PV reliability vs alpha)
- Internalizing and Externalising highly correlated
  - 0.895
- Prosocial negatively correlated with Internalizing (-0.230) and Externalising (-0.388)
- Adequate psychometric properties



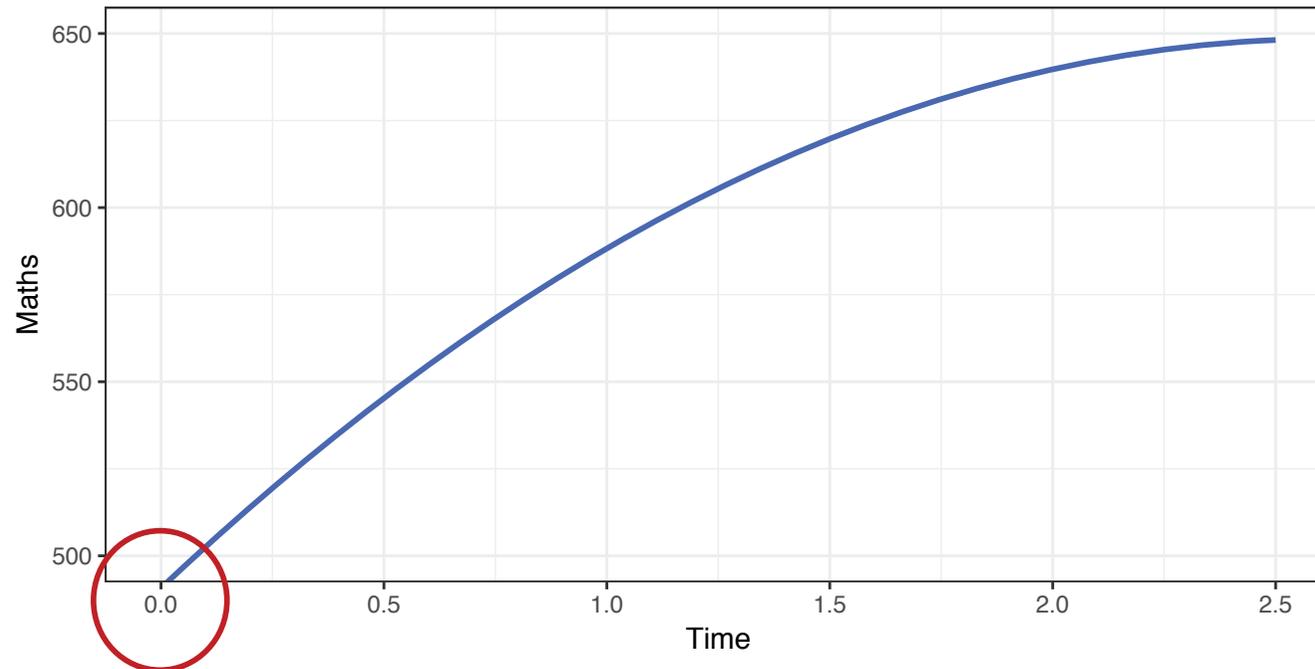
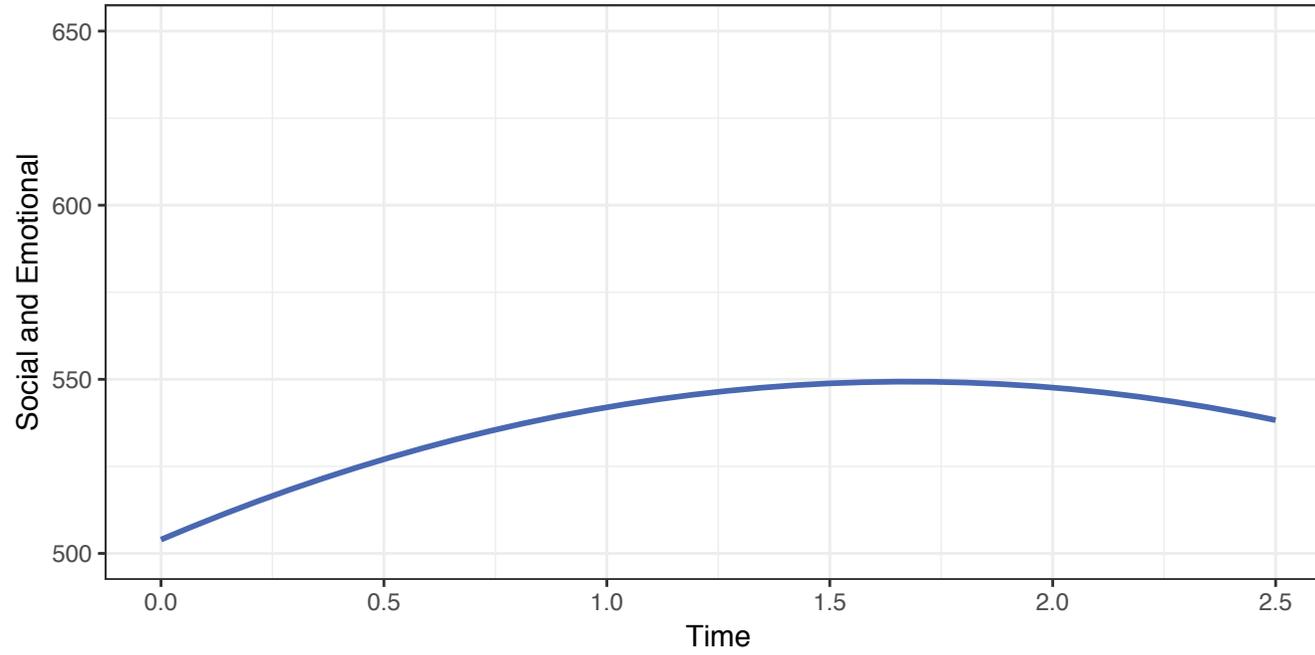
Each '•' represents 5.5 cases

# Study 2

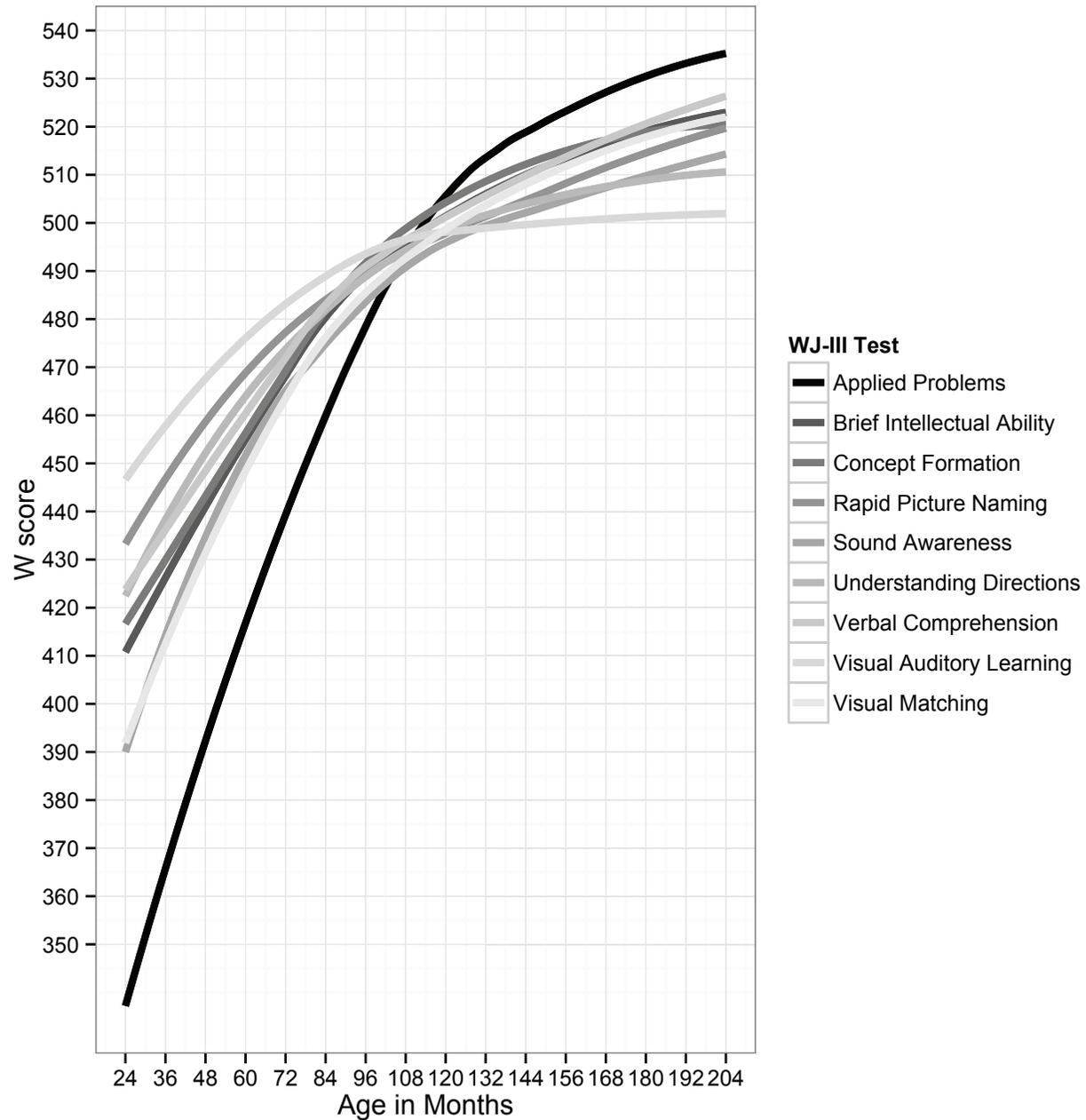
- Unnamed study



# Growth?



# Growth?





# What is the value added?

- Cross sectional (with temporal lag) shows significant effects
  - Social skills influence academic outcomes
  - Quality practice influence social skills
- Growth models show less-clear effects
  - Within-child growth is flat by age 5 on many measures
- What is the issue?
  - Social skills strongly correlated with other domains (e.g., selection may play a role in cross sectional designs)
  - Measures are inadequate to measure growth over medium term
  - Measures are not scaled using contemporary measurement theory (e.g., using sum scores instead)



# Are we measuring the right things?

- SE skills appear through ECEC and School curriculums
- We have some measures but they don't capture the higher-order abilities
  - A focus on managing stress, controlling impulses, internalising behaviours like withdrawing.
  - But what about empathy, working in diverse communities, negotiation, resolving conflict, goal setting and decision making?
    - E.g., is self awareness in SSIS really capturing empathy and perspective taking?
  - Can these things be measured through checklist about frequency of behaviours (never, seldom...)?



# So what?

- Nearly all children attend ECEC
  - 3 year-old K roll out
- Public investment in ECEC is high
  - For 0-2-year-olds, private investment is also high
  - Costs of ECEC are increasing (HILDA: childcare costs up 145% in since 2002,)
- Need an *effective* and *fair* system
  - Give all children the best start in life
  - Quantify the value-add of the ECEC sector
    - Identify examples of best practice
  - Showcase the expertise of educators
  - Facilitate clinical practice



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# Key links

- Mapping VEYLDF to F-10 curriculum
  - [http://bit.ly/veyldf\\_f10](http://bit.ly/veyldf_f10)
- Framework for 21C skills
  - <http://www.lsce-mena.org>
- Relationship between social skills and academic achievement
  - <https://doi.org/10.3102%2F0013189X19848724>
- Assessing children as confident and involved learners
  - <http://bit.ly/outcome4>
- ACER LPs
  - [http://bit.ly/acer\\_lpe](http://bit.ly/acer_lpe)
- MELQO
  - <http://ecdmeasure.org>
- EEF database
  - [http://bit.ly/ref\\_ec\\_measures](http://bit.ly/ref_ec_measures)