

Measuring

Knowledge, Skills, Values and Attitudes for Sustainable Development

UNESCO GCED Forum

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Simple framework

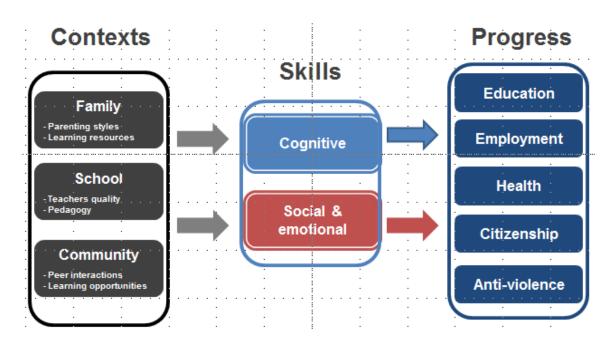
Contexts Progress Skills **Education Family** - Parenting styles **Employment** - Learning resources Cognitive **School** Health - Teachers quality - Pedagogy Social & emotional Citizenship **Community** - Peer interactions **Anti-violence** - Learning opportunities



Outline of Presentation

- 1. Lessons learned on ways to measure GCED
- 2. Contribution of OECD to subsequent work
- 3. Ways to improve the measurement agenda

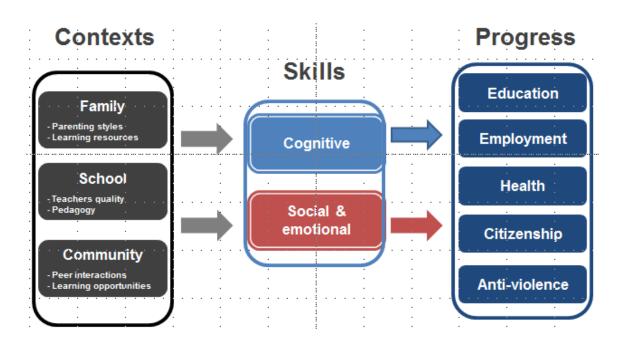




Importance of the 'whole child'

- The powers of socio-emotional skills
- Not all socio-emotional skills are relevant across countries
- Paucity of evidence on learning approaches that works across countries





Socio-emotional skills are 'hard to measure'

- Socio-emotional skills are hard to reliably measure w/i a country, extremely difficult to measure across countries
- Behavioural measures can be reliably measured but the underlying construct is not clear



Contribution of the OECD

- **ESP** (Education and Social Progress) –conceptual and methodological work
 - Identify relevant socio-emotional constructs
 - Identify relevant measurement instruments
 - Reducing biases inherent in rating scales
 - Mobilising performance-based and behavioural measures
- PISA 2015
 - Non-cognitive outcomes
- PISA 2018
 - Global competencies



Improving the measurement agenda

- Be holistic: address key dimensions of human capabilities
 - Include socio-emotional capability
- Be selective: choose relevant constructs and reliable measures
 - Drop learning context measures?
 - Include constructs that are relevant across countries: e.g., perseverance, self-efficacy, sociability, self-esteem
 - Include reliable measures: self-reports and behavioural measures
- Be realistic: explore pre-scheduled micro-data that is 'likely to' include relevant and reliable measures across a large number of countries
 - e.g., ICCS2016, PISA2015, PISA2018



Thank you



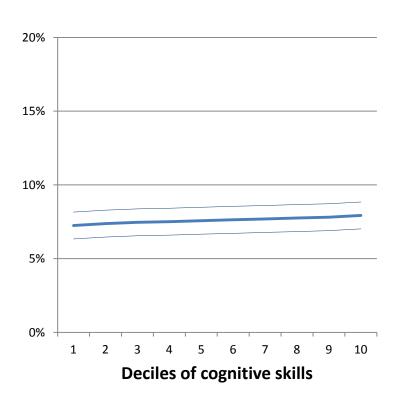


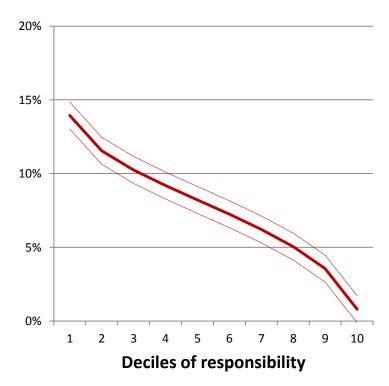
Improving the measurement agenda

| GCED and ESD key conceptual dimensions / priorities for measurement | | | | |
|---|---|--|--|--|
| Cognitive | Learners acquire knowledge, understanding and critical thinking about global issues and the interconnectedness/interdependency of countries and different populations | | | |
| Socio- emotional | Learners have a sense of belonging to a common humanity, sharing values and responsibilities and holding rights | | | |
| | Learners show empathy, solidarity and respect for differences and diversity | | | |
| Behavioural | Learners act effectively and responsibly at local, national and global contexts for a more peaceful and sustainable world | | | |



Bullying by skills (Korea)







Conceptual Framework

Skills

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Basic cognitive ability

- Pattern recognition
- · Processing speed
- Memory

Knowledgeacquired

- Access
- Extract
- Interpret

Knowledgeextrapolated

- · Reflect
- Reason
- Conceptualise

Cognitive

- Mental capacity to acquire knowledge, thoughts & experience
- Interpret, reflect and extrapolate based on the knowledge acquired

Achieving goals

- Perseverance
- · Self-control
- · Passion for goals

Social and Emotional

Relatively enduring patterns of thoughts, feelings behaviours that reflect the tendency to respond in certain ways under certain contexts

Working with others

- Friendliness
- Respect
- Caring

Managing emotions

- Calm
- Optimism
- Confidence



Conceptual Framework

Outcomes





Which social and emotional skills matter?

OECD (2014, forthcoming)

| Tasks that demand social and emotional skills | Social and emotional skills | BEL | CAN | СНЕ | GBR | KOR | NOR | NZL | SWE | USA |
|--|---------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Achieving goals | Responsibility | 0 | | | | • | | 0 | | 0 |
| | Persistence, Perseverance | 0 | | • | 0 | | | O | • | 0 |
| | Locus of control, Self-efficacy | | 0 | • | 0 | • | | | | |
| Working with others | Extraversion, Sociability | O | | | | | • | O | • | |
| | Adaptability | | | | | | | | • | |
| Managing emotions | Reactivity, Mood | | | | | | | | | 0 |
| | Self-confidence | | 0 | | | | • | | | |
| | Self-esteem | 0 | 0 | • | 0 | | | | | 0 |



Which social and emotional skills matter?

Heckman and Kautz (2014)

| | Social and | Outcomes | | | | |
|------------------------|---|--|--|---|--|--|
| Tasks | emotional skills fostered | Education | Labour market | Social | | |
| 1. Achieving goals | Conscientiousness | - | Earnings (Perry, STAR, Career academies, Year- up) | Crime (Perry)Family formation (Career academies) | | |
| | Openness to new experience | - | ●Employment (ABC) | ●Health (ABC) | | |
| | Self-efficacy | Educational attainment (Seattle) | ●Earnings (Seattle) | ●Health (Seattle) | | |
| 2. Working with others | Social, communication and team-working skills | - | Earnings (Perry, STAR, Year-up) Wages (Dominican) Employment (Dominican) | ●Crime (Perry) | | |
| others | Agreeableness (externalising behaviours) | - | ●Earnings (Perry) ●Employment (ABC) | ●Crime (Perry) ●Health (ABC) | | |
| 3. Managing emotions | Emotional stability (internalising behaviours), Self- esteem | ●Educational attainment | Earnings (Jamaican, Perry) Wages (Dominican) Employment (ABC, Dominican) | ◆Crime (NFP, Perry)◆Health (ABC)◆14 | | |



Which Learning contexts Matter?

Key features of promising intervention programmes

| | Family involvement | Parent-child attachment | Mentoring | Programmes |
|-----------------------------|--------------------|-------------------------|-----------|--|
| Early Childhood (0-4) | | | - | Abecedarian (US), Jamaican Supplementation Study, Head Start (US), Perry Pre-school (US), Chicago Child Parent Center (US), Sure Start (US) |
| Childhood (5-9) | | 0 | - | Project Start (US), Seattle Social Development (US), Montreal Longitudinal Experimental Study (Canada) |
| Adolescence (10-18) | 0 | _ | | Big Brothers Big Sisters (US), Entrepreneurs for Social inclusion (US), Becoming a Man (US), Pathways to Education (Canada), National Guard Challenge (United States), Job Corps (US), Dominican Youth employment Program, Year-up (US), Joven (Chile) |