

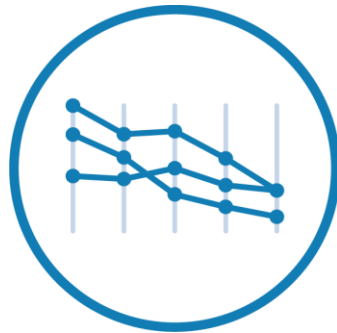
Measuring and analysing economic, cultural and social status in large-scale assessments

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Equity in education

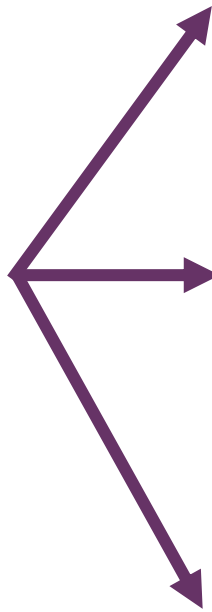
Students' Economic, Cultural, and Social Status (ECSS) is an important indicator of equity in education.



Students with higher ECSS tend to achieve higher scores than students with lower ECSS.

However, ...

Definitions, operationalisations and measurement models of ECSS indicators are **inconsistent** across different educational large-scale assessments



Limiting ...

Comparability of results

Creation of a comprehensive body of evidence of educational outcomes and equity-related factors

Usability of findings for developing policies to improve equity in education

GEM Centre research on ECSS



Purpose

Raising awareness and addressing the observed limitations of ECSS indicators for monitoring equity in education

Methods

- Literature review (Osse, Adams & Schwantner, forthcoming, 2023)
- Empirical studies (Osse, Adams & Schwantner, 2023, August; January; 2022, September)

KEY FINDINGS

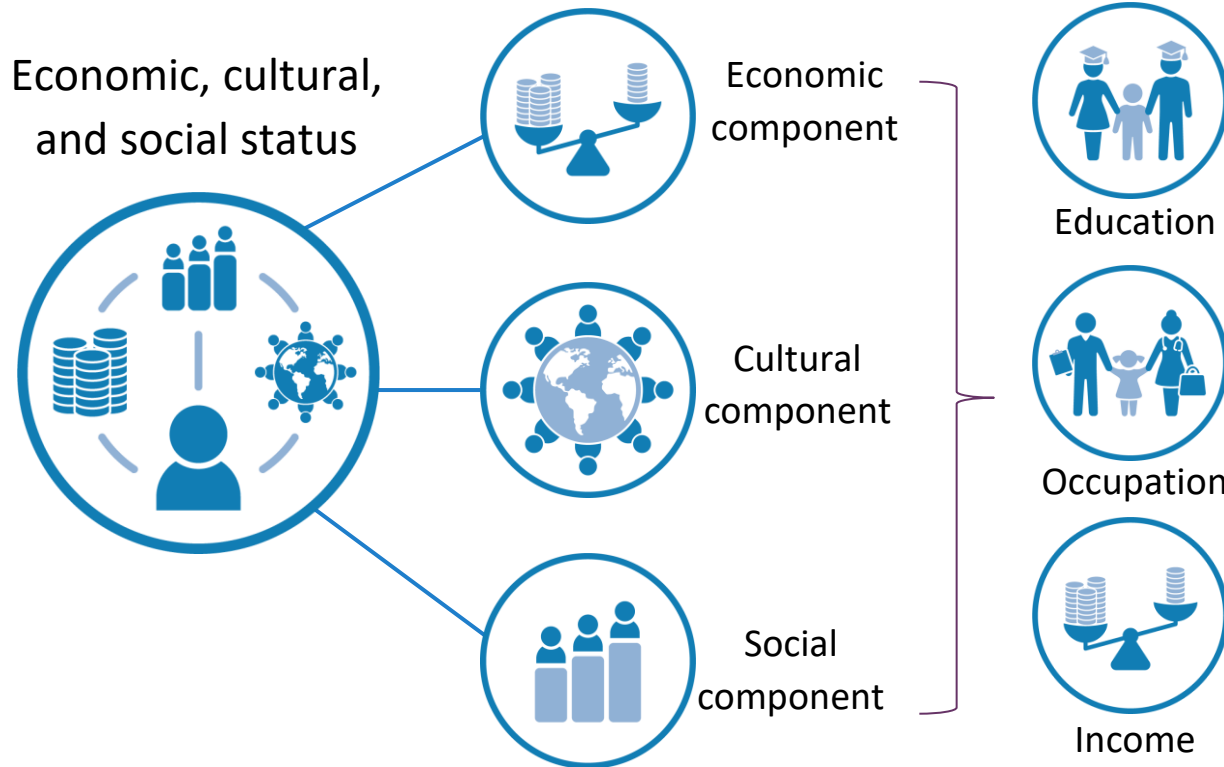
Quality of ECSS
indicators



Defining the construct



Operationalising the construct



Inconsistencies in:

- Components included
- Operationalisation of each component

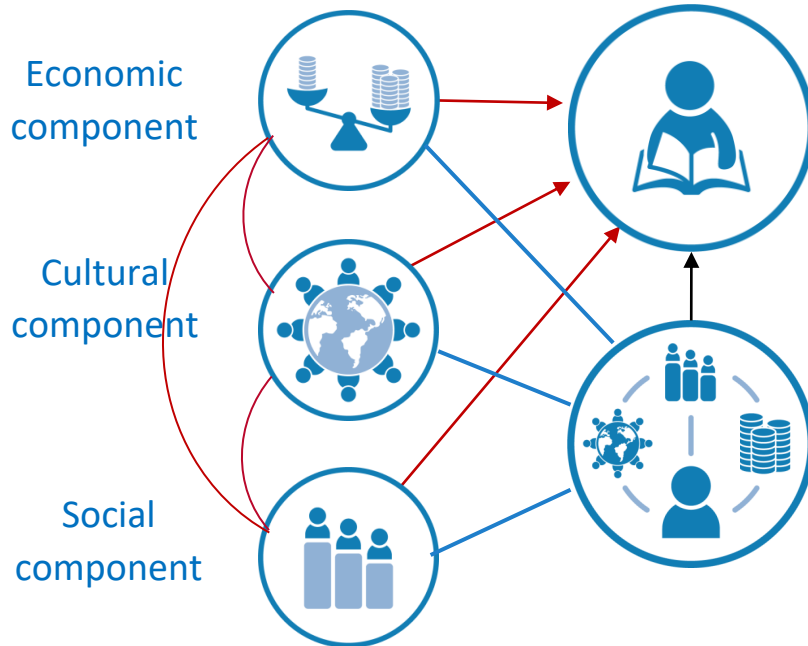
Example: Operationalisation

	Parental Occupation	Parental Education	Home possessions
PISA 2018	Highest occupation status of parents <i>(ISEI)</i>	Highest educational attainment of parents <i>(ISCED, transformed into years of education)</i>	Home possessions <i>(list of 22 possessions, including 3 country-specific items and number of books in the home – 3 categories)</i>
SEA-PLM 2019	Parents' occupation <i>(8 categories)</i>	Highest educational attainment of parents <i>(ISCED, transformed into years of education)</i>	Home resources index <i>(including home possessions, child meals per day, household infrastructure, source of lighting, presence of electricity and water, number of books in the home)</i>
PILNA 2021	No	Parental education Highest level of parental education <i>(ISCED 2011, transformed into 5 categories)</i> University-level parental education <i>(dichotomous variable)</i>	Scale for household wealth <i>(list of home possessions and facilities, including telephone, TVs, and cars, electricity, a flushing toilet and tap water)</i>

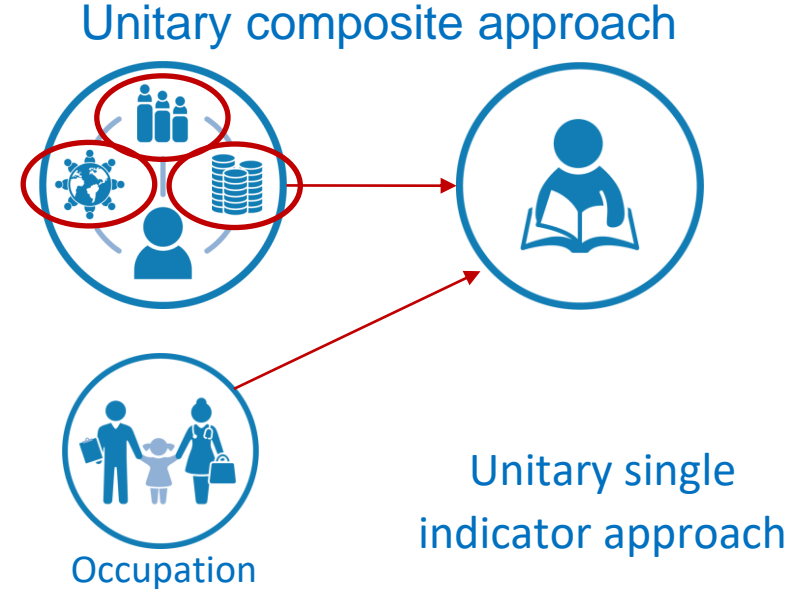
Applying a consistent measurement model

A measurement model relates the construct to its indicators in analytical terms.

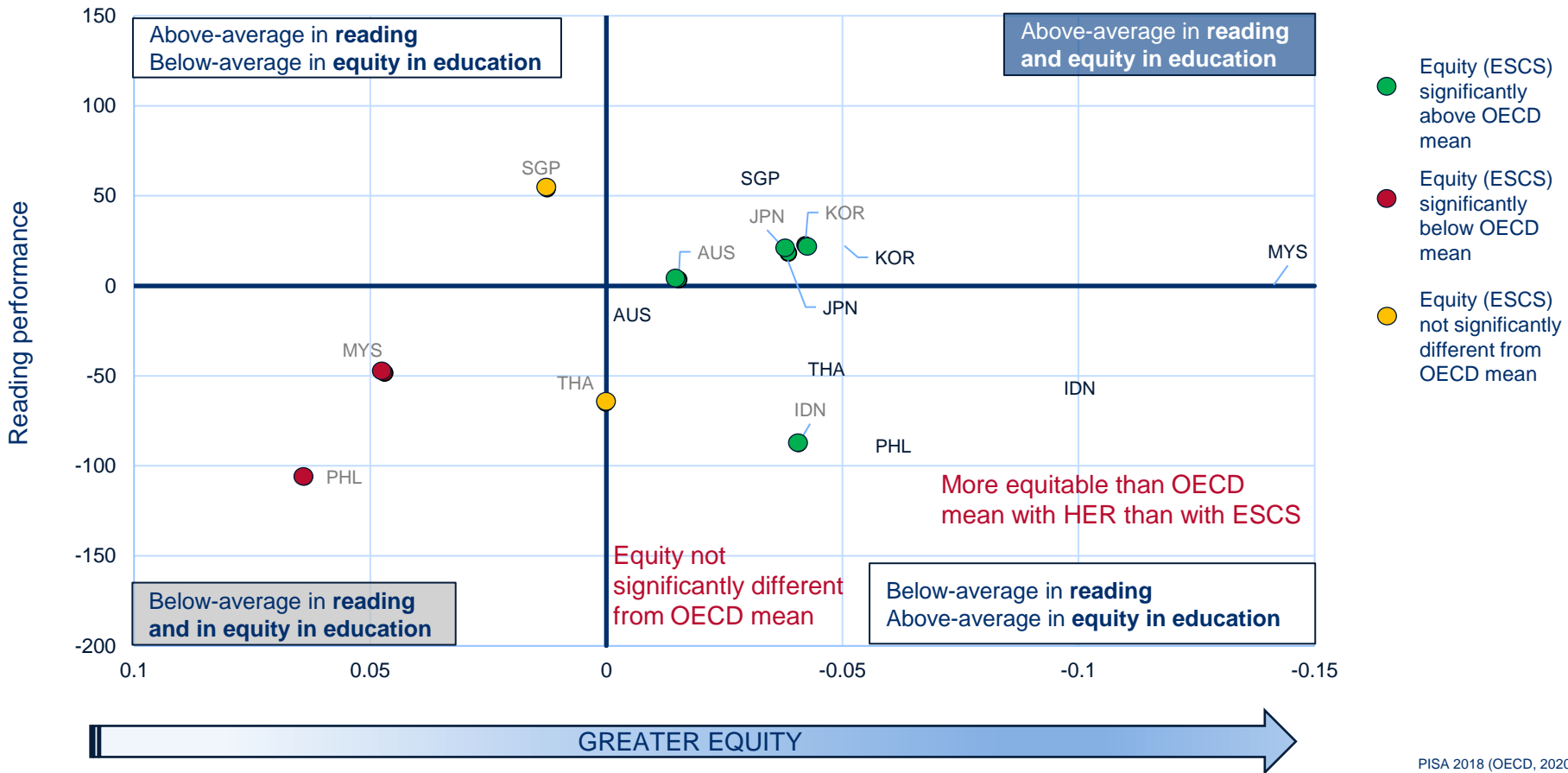
Component approach to ECSS



Unitary approach to ECSS



Example: Impact on outcomes



How can we improve ECSS indicators?

Clearly define the ECSS construct based on existing theories and conceptual models

Operationalise all three components of the economic, cultural, and social status construct through a set of indicators

Apply a consistent measurement model

Document indicator development and (psychometric) properties for transparency and improved interpretation of findings



Thank you!

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Australian Government
Department of Foreign Affairs and Trade



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