# Options for Reporting against 4.1.1 when using national assessment programs

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# Aligning assessments to the minimum proficiency levels (MPLs)

- the purpose of assessment program alignment is to enable transparent reporting of the progress towards meeting SDG Indicator 4.1.1 for countries and system wishing to use their existing assessments and data
- operationally this entails empirical linking of the assessment program scales with the minimum proficiency levels and corresponding item exemplars – the global MPLs' item pool
- the local differences in the scope and type of assessment program information, resources and expertise require a range of alignment methods to meet diverse contexts and needs

# Alignment and status evaluation options and steps

There are three types of alignments available for national assessment programs:

- learning area alignment
- policy alignment
- empirical alignment

The purpose of this presentation is to outline options for the empirical alignment of assessment programs and MPLs.

# Empirical alignment options

Empirical alignment provide statistical linking of the assessment program scales and the MPLs, can be separated to methods that:

- do not require collection of new data on students and items – use different forms of expert judgements
- do require collection of new data on students and item – use psychometric equating methods

Importantly all these methods use and require the global pool of exemplar items that illustrate the rigour and requirement of each of the MPLs

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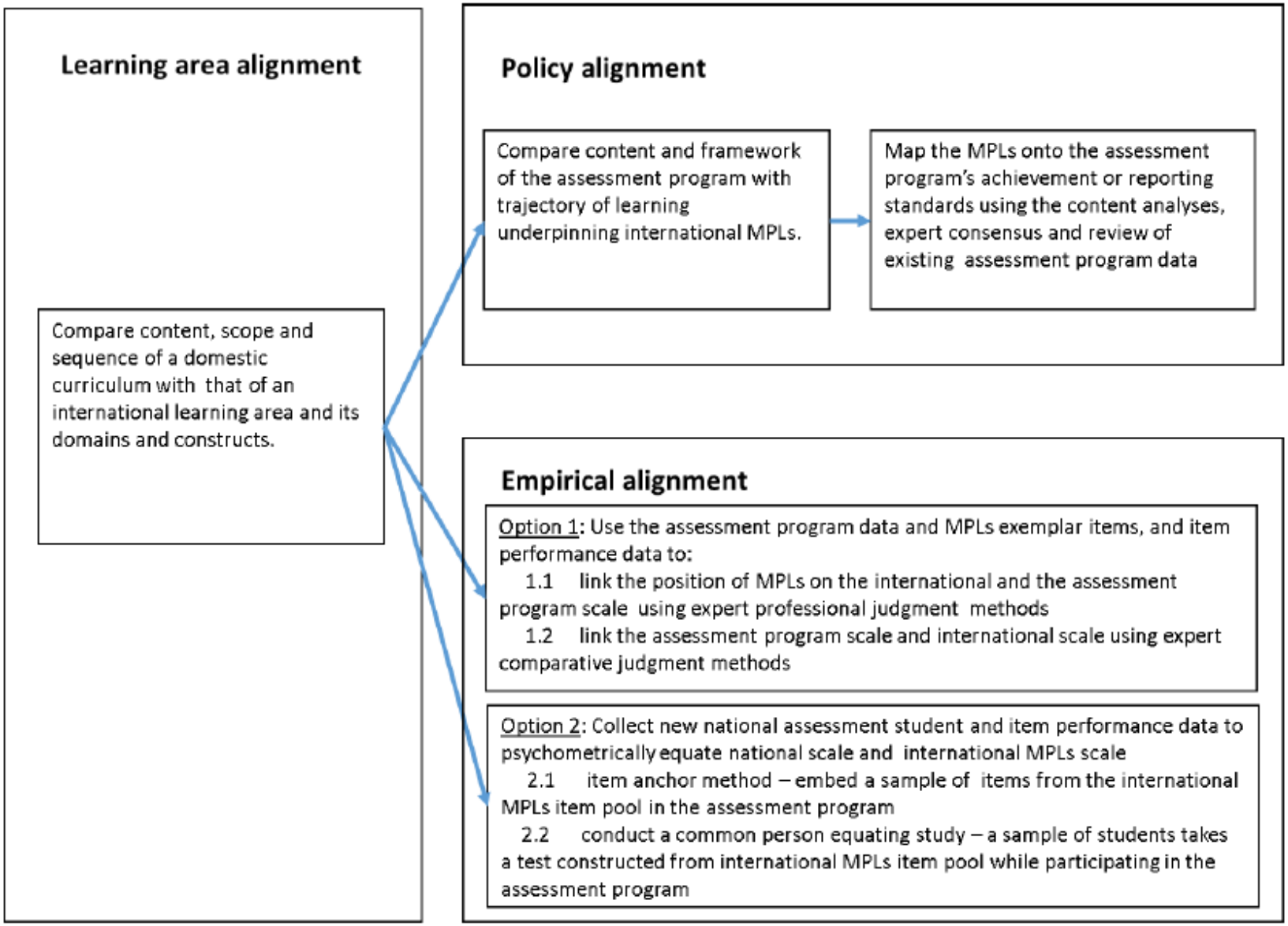
# Relationship between three assessment alignment steps



# Option 1: Empirical alignment without new assessment data collection

- **benchmarking** - linking the position of MPLs onto an assessment program scale using expert professional judgement – bookmark standard setting methods using the global MPLs and assessment program items
- **pairwise comparison** - linking an assessment program scale and a scale derived from items at and around each MPL using expert comparative judgements on pairs of items from assessment program and global MPLs item pool

# Option 1: Empirical alignment requirements comparison

| Requirements | Method 1.1 Benchmarking demand | Method 1.2 Pairwise comparisons demand |
|---|---|---|
| learning progression and criterion-referenced assessment understanding | High | Low |
| overall level of assessment literacy | High | moderate |
| expertise in standard setting activities | Moderate | Low |
| expertise in assessment scoring | Moderate | moderate |
| judges training | High | Low |
| implementation logistics | centralised - high level of supervisor | decentralised -low level of supervision |
| access to computers and internet | not required | essential |
| data capture and cleaning | high – to transcribe and collate judgment data | low – judgment captured by a system |
| psychometric expertise | low to moderate | moderate |

# Option 2: Empirical alignment requiring new assessment data collection

- **item anchor equating** – embedding a sample of items from the global MPLs item pool in the assessment program's test(s)
- **common person equating** – administering to a sample of students the assessment program's test(s) and a test(s) constructed using the global MPLs item pool

# Option 1: Empirical alignment requirements comparison

| Requirements | Method 2.1 Item anchoring demands | Method 2.2 Common person equating demands |
|---|---|---|
| new assessment material development | low | moderate to high |
| sample size | Low | moderate to high |
| implementation logistics | low to moderate | moderate to high |
| data capture and cleaning | low to moderate | moderate to high |
| psychometric expertise | high | high |

# Empirical alignment: Final recommendations

- the empirical alignment must be supplemented by systematic and structured comparison of learning trajectories underpinning the learning areas, domains and constructs of the assessment program and MPLs –learning area and policy alignment should be done first
- these activities will provide crucial information to guide alignment planning and implementation and thus should be done ahead of any empirical alignment activities
- the learning progress mapping in particular provides a strong scaffolding to conduct and evaluate the empirical alignment outcomes
- a set of protocols  to guide these conceptual mapping activities will ensure the consistent and transparent implementation