Internationalization of Higher Education in the Asia-Pacific: Toward a Mapping of Indicators and their Utilization

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<Background>

Stakeholders Meeting on Indicators for Internationalization of Higher Education in ASEAN+6
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- Which indicators for internationalization are needed at systems level to promote quality higher education in ASEAN+6?
- What are the most relevant institutional level indicators to measure quality higher education in ASEAN+6?
Higher Education in the Asia-Pacific

- Large, dynamic, international, diverse
- Relatively little tracking of internationalization in the region
- Little shared understanding of how internationalization of higher education (and what about it) should be tracked
- To map indicators, it is useful to think about
  - what they might measure
  - how they might be used
- Then to examine existing public indicators along those dimensions to see current state
- Primary purpose today:
  - to discuss indicators
  - to discuss mapping of indicators
  - to take preliminary look at current state of indicators in Asia/Pacific
  - to draw some initial conclusions
What is internationalization?

- Many definitions in circulation – Knight, deWit, and Larsen, etc.
- Different emphases:
  - Discrete activities and/or Holistic processes
  - Add-on or Integral/Core
  - Inputs, processes and/or Outputs/outcomes
  - At home and/or abroad
  - Social process, phenomenon that emerges out of the global networks and flows (or students, faculty, and knowledge)
Internationalization of higher education is the intentional expansion of the spatiality of post-secondary education through cross-border mobilities and connections among institutions, students, scholars, knowledge, programs and delivery (systems and providers).
What are the main domains of Internationalization?

<table>
<thead>
<tr>
<th>Domain</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Student mobility</td>
<td>Outbound and inbound international study</td>
</tr>
<tr>
<td>2. Faculty/Teaching staff mobility</td>
<td>Faculty exchange</td>
</tr>
<tr>
<td>3. Research</td>
<td>International collaborative research, conferences and journals</td>
</tr>
<tr>
<td>4. Institutional linkages</td>
<td>MOUs between universities</td>
</tr>
<tr>
<td>5. International presence/Cross-border education</td>
<td>International branch campus</td>
</tr>
<tr>
<td>6. Internationalization at home</td>
<td>Online internationalization</td>
</tr>
<tr>
<td>7. Regional connectivity, harmonization, integration</td>
<td>Associations such as ASEAN University Network</td>
</tr>
<tr>
<td>8. Ranking</td>
<td>QS ranking</td>
</tr>
<tr>
<td>9. Planning for internationalization</td>
<td>National plan or roadmap for internationalization</td>
</tr>
<tr>
<td>10. Curriculum/educational program</td>
<td>Creation of English medium academic program</td>
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</tbody>
</table>
What are indicators?

- Not all statistics about education are indicators. Statistics qualify as indicators only if they serve as yardsticks.

- Useful indicators:
  - are “relevant, cost-effective, timely, reliable and valid,” “resulting in measurable improvements to desired outcomes”
  - must make sense in different contexts in which they will be applied, be coherent, transparent, comparable across sources and contexts, and consistent over time and place.

- Indicators may be used for: monitoring, policy formulation, target-setting, evaluating and reforming:
  - **Description**: to inform policy makers, citizens, other stakeholders about trends, patterns, areas of concern and outcomes.
  - **Monitoring**: to track outcomes, usually against desirable criteria, formal or informal.
  - **Setting goals**: to establish quantifiable targets, usually to be met within a specific time period.
  - **Increasing accountability**: to link positive/improved outcomes to responsible organizational units.
  - **Reflective practice**: to inform the improvement of programs and practice, often on an ongoing internal basis (Moore & Brown 2003).
Indicators can measure ...

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Domain or Function</td>
<td>Domain/Functional aspects of internationalization/</td>
</tr>
<tr>
<td></td>
<td>Type of internationalization activity, e.g., student mobility, branch campuses, etc.</td>
</tr>
<tr>
<td>Qualitative details</td>
<td>Details about internationalization activity. e.g., for student mobility, length of program, goals of program, degree seeking/conferring, undergraduate/graduate, credit transfer, etc.</td>
</tr>
<tr>
<td>Stages</td>
<td>What stage of the internationalization process does the indicator measure? Inputs, Processes (Means) or Outputs, Outcomes (Ends)</td>
</tr>
<tr>
<td>Aggregation</td>
<td>What level of aggregation is the indicator reported? e.g., International, Regional, National, Institutional, Sub-institutional</td>
</tr>
</tbody>
</table>
Indicators can measure ... (2)

<table>
<thead>
<tr>
<th>Dimension</th>
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<tbody>
<tr>
<td>Source</td>
<td>Nature of entity that collects, maintains indicator</td>
</tr>
<tr>
<td>Existing</td>
<td>To what extent does the indicator exist already, or must data be collected afresh?</td>
</tr>
<tr>
<td>Availability</td>
<td>Are data available for use by organizations and individuals not associated with the owner/source of the data? Under what conditions?</td>
</tr>
<tr>
<td>Comparability</td>
<td>To what extent is the indicator comparable across similar units—countries, institutions, programs?</td>
</tr>
<tr>
<td>Updating</td>
<td>Are data collected &amp; updated regularly? Time to time? One off?</td>
</tr>
</tbody>
</table>
### How indicators are used...

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<th>Examples</th>
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<tr>
<td><strong>Application</strong></td>
<td>Is the indicator actively used? Or is it just collected?</td>
<td>Actively used? Collected and maintained but not used? Don’t know?</td>
</tr>
<tr>
<td><strong>Purpose</strong></td>
<td>What is the indicator used for? (general or specific purposes)</td>
<td>Generally: Description; Monitoring; Setting goals; Increasing accountability; Reflective practice; Comparison Specific Purposes: To track number of faculty publishing in international journals</td>
</tr>
<tr>
<td><strong>Internal /External</strong></td>
<td>Is the indicator used for internal processes and/or for external reporting and/or information</td>
<td>Internal (e.g., internal quality assurance) or External Use (e.g., external quality assurance)</td>
</tr>
<tr>
<td><strong>Stakes</strong></td>
<td>Are incentives or sanctions attached to the indicator?</td>
<td>High, Medium, Low</td>
</tr>
<tr>
<td><strong>Fit</strong></td>
<td>Does the use of the indicator fit its purpose?</td>
<td>Yes … (how); No … (how) Are there unintended consequences?</td>
</tr>
</tbody>
</table>
Our Study

- To provide a portrait of the current state of indicators of internationalization of higher education in Asia/Pacific and their use we:
  
  i) developed a **typology of domains of internationalization** (see slide 6)
  
  ii) reviewed available sources (and uses) of data and indicators to understand the **types of data currently available**
  
  iii) carried out a **frequency analysis** of those domains as seen in the academic and agency literatures and in online datasets
## ii) Types of available data (1)

<table>
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<th>NOTES</th>
</tr>
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<tr>
<td>1. International statistics on higher education</td>
<td>UIS, OECD, some national governments; Useful context of higher ed, little on internationalization; Little indication of use</td>
</tr>
<tr>
<td>2. International statistics on internationalization of higher education</td>
<td>UIS, OECD, some national governments; Focused mainly on student mobility; Little indication of use</td>
</tr>
<tr>
<td>3. Government statistics</td>
<td>Varies by country; Difficult to compare; Variable availability; Variable utilization</td>
</tr>
<tr>
<td>4. Institutional data</td>
<td>Varies by institution; Difficult to compare; Mostly unavailable; Variable utilization; Some institutional data is likely to be standardized for reporting to national authorities</td>
</tr>
</tbody>
</table>
### ii) Types of available data (2)

<table>
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<td>5. Regional data</td>
<td>Regional bodies, e.g., ASEAN, have various initiatives and programs, e.g., AUN or AIMS, with data; Currently no master plan for identifying, collecting, utilizing data across region</td>
</tr>
<tr>
<td>6. University ranking/League tables</td>
<td>Collected, held by organizations that publish university rankings; High stakes; Closely watched</td>
</tr>
<tr>
<td>7. Institutional development focused indicators</td>
<td>Collected, utilized to varying degrees and ways by individual institutions for self-defined; generally not comparable or available outside the institution</td>
</tr>
<tr>
<td>8. Research data</td>
<td>Data collected for research projects; generally collected once, not comparable, available from researcher/sponsor</td>
</tr>
<tr>
<td>9. Ad hoc data</td>
<td>Various statistics collected for other purposes</td>
</tr>
</tbody>
</table>
iii) Frequency analysis of internationalization domains

- Systematic literature review
  - Academic (some agency) literature
    50 research paper/reports in final sample
  - Online data sources
    54 indicators
    84 when classified into relevant categories
  - Four country level data sources: Japan’s Ministry of Education, Culture, Sports, Science and Technology (MEXT); Japan Student Services Organization (JASSO); Australia’s Department of Education and Training; India’s Ministry of Human Resource Development 54 indicators

- Classified using 2 level typology
Frequency of domains in literature

- Student Mobility
- Curriculum/educational program
- Faculty/teaching mobility
- Regional connectivity, harmonization, integration
- Research
- Institutional Linkages
- International Presence
- Planning for internationalization
- Internationalization at home
- Ranking

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Frequency of domains in indicators

- Student Mobility
- Ranking
- Faculty/teaching mobility
- Institutional Linkages
- Research
- Regional connectivity, harmonization, integration
- International Presence
- Internationalization at home
- Planning for internationalization
- Curriculum/educational program

The chart shows the frequency of domains in indicators, with Student Mobility being the most frequent, followed by Ranking and other domains.
Indicators of student mobility in depth

- Outbound and inbound student mobility for degree programs (undergraduate, master, and doctoral level) 14%
- In from Specific Regions/Countries & Out to Specific Regions/Countries 35%
- Undergraduate vs Graduate 7%
- Short-term vs Medium-term vs Degree-seeking 7%
- Student exchange program 9%
- Academic partnership for home degree or joint degree 9%
- other 19%
Main Findings

1. Student mobility is main domain of higher education internationalization in both literature and indicators.

2. Indicators capture complexity of student mobility.

3. Similarly-focused indicators on student mobility diverge across agency.

4. There is no single source for a full range of data on internationalization in the region.

5. Potentially rich data exist in region, but there is no system for making most of it available.

6. The patterns of (or possibilities for) use of most existing data are not known.

7. Divergence between theory (what is discussed in literature) and practice (what is available).
Discussion of findings

- Lots of data, especially at national, institutional levels
  - But much of it is not comparable
- No complete picture of internationalization of HE in region
  - No master plan or framework for data collection & utilization; (no master)
- Purposes unclear (of IHE and of indicators of IHE)
  - Utilization unclear (if, how, intent)
- Existing data focus very heavily on student mobility
  - Still, relatively little detail about that mobility
- Existing data focuses on context, inputs, activities
  - Little data on outcomes
  - E.g., little on cross-cultural understanding
- No apparent consensus about outcomes to measure & how
- So, beyond lots of activities, little understanding of big picture or trends
  - Little understanding of effects of all these activities
Moving forward

- On technical side
  - Needed are systems for:
    - 1) development of appropriate good indicator system,
    - 2) collection of data, and
    - 3) utilization of data
  - Maximalist versus minimalist approaches
  - Finishing background analysis and paper
  - Stakeholders’ fleshing out of gaps, provision of case material
- On the academic side...
How do we want to use indicators?

- Recalling slide 7, uses of indicators to describe, monitor, promote accountability or reflective practice
- Do we want to understand:
  - Development and functioning of international relations offices?
  - Patterns of student mobility across region and/or beyond?
  - Details of student mobility programs?
  - Extent of internationalization within ASEAN+6?
  - Comprehensiveness of internationalization of region’s universities?
  - Extent of cross-border research carried out in region?
  - Extent of internationalization of curriculum, or “internationalization at home”?
  - Extent to which regional/global consciousness and citizenship is developed?
  - Increases in global ranking of ASEAN+6 universities?
  - Impact of international study on individuals? universities? economies? peace?
“Knowledge Diplomacy”

- The four pillars or cross-cutting dimensions of “knowledge diplomacy” are:
  - **Education** - formal, informal and lifelong learning
  - **Research** for the generation and sharing of knowledge
  - **Innovation and application** of new knowledge for the benefit of society as a whole
  - **Culture** in terms of basic values, ways of knowing, and the multiple expressions of culture (Knight, 2015)
What are Diplomatic impacts?

- Issues to be discussed
  - Education: outside formal system?
  - Research: more attention on fields of study/research topics in international research collaboration (i.e., contribution to society?)
  - Innovation and application of new knowledge: collaboration with non-academic actors (e.g., private sector, civil society organizations, etc.)
  - Culture: competencies to promote mutual understanding across borders

- Massification of education should require discussion on the concept of “knowledge diplomats”
  - Impacts in the longer-term
Questions? Feedback!

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