Internationalization of Higher Education, Mapping and Measuring

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Synonyms
Assessing; Assessment; Goals; Impact; Indicators; Internationality; Internationalization; Process

Definitions
Mapping internationalization is an exercise which does not evaluate the results but just presents the initiatives undertaken, usually covering different geographical regions or subject areas or activity areas (such as research vs. teaching). Measuring internationalization is an exercise in which by usually using quantitative indicators the performance of an institution in this area can be reflected.

Summary
Measuring internationalization is currently en vogue. Often internationalization as a process and internationality as a status are confused and accordingly the wrong indicators are applied. Internationalization can also serve very different purposes and the reasons for assessing it can also vary (mainly mapping, evaluating, profiling). Different approaches and tools can satisfy these varying needs and interests to different degrees and there is no “one size fits all” approach. Additionally, the costs related to the different tools vary substantially and have to be taken into account in the decision-making process. The most important aspect before measuring internationalization, however, is to first know why the institution wants to internationalize in the first place.

From Irrelevant to Hype
Today, it looks as though measuring internationalization is standard and normal. There is virtually no conference without sessions on how to measure internationalization. It is, however, a rather new phenomenon. When Gero Federkeil and myself together with a number of colleagues from German Higher Education Institutions (HEIs) published a working paper on how to measure internationalization in 2007 Brandenburg and Federkeil 2007 – only 10 years ago -, it was rather unique in that it developed a comprehensive set of indicators to measure internationalization of teaching and research. In the context of the Indicators for Mapping and Profiling Internationalisation (IMPI) Project, an extensive literature review on the issue was published and one can see that – if analyses were conducted at
all – they were usually individual and very case-specific analyses done prior to this endeavor (Beerkens et al. 2010). A remarkable exception is e.g. the Internationalisation Quality Review by the Organisation for Economic Co-operation and Development (OECD) and the Academic Cooperation Association (ACA).

The issue of outcomes of internationalization was, at that time, even less an area of focus, with analysis of input and output predominating.

**Internationalisation Is Not Internationality**

The most common definition of internationalization is that of Jane Knight, which rightly describes internationalization as a process (Knight 2008, 21). This characteristic is of particular relevance if we want to measure internationalization because a process needs entirely different indicators to measure its progress than a status. For a status, it is sufficient to analyse what happens in a snapshot (e.g. the number of exchanges or the percentage of incoming students in the academic year 2016). For a process, one needs to analyse what has happened until the moment of analysis (e.g. the change rate of incoming students from 2000 to 2016). Further, if the aim of the exercise is to improve the process, predictions on the future development based on analysis of the existing developments (e.g. what will most likely be the exchange rates in the next 5 years under certain conditions) are needed.

Nevertheless, if we look at most also recent tools claiming to measure internationalization, they in fact measure a status and not a process. The differentiation here should be between internationalization (as a process) and internationality (as a status), described in (Brandenburg and Federkeil 2007):

**Internationality** describes either an institution’s current status or the status discernible at the date of data acquisition with respect to international activities.

In contrast, **internationalisation** describes a process in which an institution moves, in a more or less steered process, from an actual status of internationality at time X towards a modified actual status of extended internationality at time X+N. In this instance, in the event of proper planning, the actual status is set against an expected target status. The result is then the difference between the actual situation after expiration of the period n and the desired situation after expiration of the period n. (Brandenburg and Federkeil 2007, 7)

Therefore, when looking at different ways of measuring international aspects, one needs to differentiate clearly between the status quo and the process in relation to the reason(s) for or purpose(s) of measuring internationalization/internationality. Most of the data that one may collect will measure internationality, i.e. a snapshot or moment in time. However, what one really wants to assess is the development over time, the process. Especially in the current debate about impact it becomes increasingly important to be precise in what one measures, to which end and with which type of indicators or data.

**Why Measure Internationalization or Internationality?**

Clearly, different actors may be interested in measuring internationalization: ministries or supranational authorities like the European Commission (because the finance), organisations such as the OECD, networks of HEIs or individual HEIs. In this article, I focus on the individual HEIs, as all matrices I will use would look quite different for each type of actor.

Regardless of who wants to assess internationalization, each actor must or at least should have a reason to do so. The European Association for International Education (EAIE) nicely sums up three reasons to measure internationalization/internationality: (http://www.eaie.org/blog/culture-measuring-internationalisation/) mapping, evaluating, profiling. They call for very different ways of measuring and do not all equally address the issue of internationalization vs. internationality. In fact, the relation can be described as a matrix:

As we can see, internationality is most relevant for mapping because it reflects the status quo up to the current point in time, while the mapping of processes is possible but seldom undertaken. It is also very common in evaluations which
nevertheless usually claim to assess internationalization. Internationalization, on the other hand, is mainly to be found in profiling approaches (if at all) because the profile is directed towards the future and the process of internationalization is the best predictor for the development of a profile. However, even in these cases such profiling is too often based on input (such as number of placements or partner universities) or status quo related output (such as the percentage of exchange students), indicators rather than process related output indicators (such as the change in percentage of exchange students and the extrapolation of future developments), or outcome indicators (such as the increase in language skills). It is extremely rare to find approaches measuring impact on the individual (e.g. change of personality traits) or institutions (e.g. organizational changes). Only very recently, this has become more widely spread, especially due to the Erasmus Impact Study (EIS) 2014 (Brandenburg et al. 2014), the Erasmus Impact Study Regional Analysis (EIS RA) 2016 (Brandenburg et al. 2016), and the European Voluntary Service (EVS) Impact Study 2017 (Brandenburg et al. 2017).

Which Tool for Which Purpose?
Not every tool or approach will be equally useful for every purpose or reason to measure internationalization/internationality. Again, one can show this best in a matrix which compares different tools (IMPI 2017; MEMO 2017; MINT 2017; IDI 2017; AIM 2017):

<table>
<thead>
<tr>
<th>Internationalization</th>
<th>Mapping</th>
<th>Evaluating</th>
<th>Profiling</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internationality</td>
<td>Low</td>
<td>Medium</td>
<td>High</td>
</tr>
</tbody>
</table>

Clearly, also the cost factor needs to be taken into account when deciding about the right approach to measuring internationalization/internationality. This does not only refer to concrete costs to be paid to an external entity (product costs, external (consultant/expert) staff costs) but also internal costs (mainly staff costs, probably also infrastructure). Most tools will come at an external cost (with the exception e.g. of IMPI) as do audits and external evaluations. All of the approaches also require internal investment, substantially so in the case of evaluations and audits. The only “free” source is external research, however, in that case the data is not custom made for the end user and thus an HEI can usually only make use of some of the data and suggestions made in order to map or profile itself.

Especially for profiling and evaluation, it seems a priority that any approach selected should compare inputs, outputs, outcomes and impacts as described above. Given that most tools and instruments lack at least some of these dimensions, it seems advisable to combine different tools and approaches to achieve what is intended to achieve.

However, a certain procedure of steps needs to be taken for any such exercise to be meaningful. Firstly, one needs to clearly identify the goals of the internationalization endeavor that one intends to embark on. Only once these goals are clear – and the use of the IMPI toolbox might help here – one can start to develop an assessment or monitoring scheme for the process of internationalization.

In other words, if you do not know why you are doing it, don’t try to measure what you did or want to do (Tables 1 and 2).
### Internationalization of Higher Education, Mapping and Measuring, Table 2

Use of measuring tools and purposes/reasons

<table>
<thead>
<tr>
<th>Audit</th>
<th>Mapping</th>
<th>Evaluating</th>
<th>Profiling</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-assessment</td>
<td></td>
<td>Low to medium</td>
<td></td>
</tr>
<tr>
<td>External evaluation</td>
<td></td>
<td>Medium</td>
<td></td>
</tr>
<tr>
<td>Tools (such as Indicators for Mapping and Profiling Internationalisation (IMPI), Monitoring Exchange Mobility Outcomes (memo©), Mapping Internationalisation (MINT), Intercultural Development Inventory (IDI), ACA Internationalisation Monitor (AIM))</td>
<td>High</td>
<td>High</td>
<td>High</td>
</tr>
<tr>
<td>(External) research</td>
<td></td>
<td>High</td>
<td>Medium to high</td>
</tr>
</tbody>
</table>

Source: Author

### References


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