The urgent challenge facing by university leaders: measuring internationalisation performance

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Abstract

Higher education has been deeply involved in the process of globalisation and has experienced consequent changes. In order to successfully operate in the globalised higher education landscape, universities worldwide continue to foster a commitment to internationalisation. As internationalisation has become a central concern of universities, more sophisticated information and useful tools are needed to help with mapping and measuring the phenomenon. This article examines how internationalisation is being measured in different universities in Australia and China. Through in-depth interviews with university leaders and head of office, the study presents an analysis of the current practice in 15 selected universities in relation to measuring the degree of internationalisation. The findings of the study shed light on the importance of the assessment of internationalisation as well as the obstacles impeding the development of effective measures for it.

Introduction

Higher education has been deeply involved in the process of globalisation and has experienced consequent changes. In the increasingly globalised environment in which every university is more visible to the other, it is no longer possible for individual universities to seal themselves off from global impacts. A new global higher education landscape is emerging and, within it, the distribution of capacities and resources between universities in many respects determines their global position and potential (Marginson & van der Wende, 2007). The impacts that globalisation is having on higher education largely provide the external impetus for accelerated institutional internationalisation. In order to operate successfully in the current environment, universities must continue to foster a commitment to internationalisation and make significant efforts to integrate the international dimension into key areas of university operation. As internationalisation has now moved from the margins of institutional interests to the very core, more sophisticated information and tools are needed to better monitor and measure this phenomenon. This paper examines how the performance of internationalisation is being monitored and measured in flagship universities in both Australia and China. It also reveals the barriers to developing effective measurement of university internationalisation. In this study, the term 'internationalisation' is used in its broadest sense and it includes internationalising the student body, faculty, curriculum, research, governance and engagement. The details will be discussed later in the paper when considering measures of internationalisation. In this regard, Knight's (1994, p. 7) definition of a 'process of integrating an international or intercultural dimension into teaching, research, and service functions of the institution' aligns with the use of the term 'internationalisation' in the present study.

Urgent demand for measurements of university internationalisation

While internationalisation used to be an aggregation of dispersed activities within higher education institutions, it has evolved into a comprehensive strategy that should be approached in a holistic way. This shift adds to the complexity of university internationalisation and creates a need for better data. The challenge is not just about more internationalisation, but better internationalisation. Three reasons explain the urgent demand for measurements of university internationalisation. First, universities require reliable information in order to monitor and assess their performance, and to avoid expressing themselves vaguely about their internationalisation status; with the later, either what is meant or who

makes these assessments is explicit (Knight, 2008; Stier & Borjesson, 2010). Precise and relevant measures of achievements will help provide information to reduce the vagueness in university's self-representation. They may also contribute to make a distinction between strategic aspiration and strategic reality and to recognise that, for some universities, there is a 'gap' between the two. This information enables universities to identify their areas of strength and weaknesses and then initiate improvement (Knight, 2008; Maringe & Foskett, 2010).

Second, because of the increased global competition and the importance of rankings, institutions need data to help profile themselves and make comparisons with peers in terms of internationalisation (Beerkens et al., 2010). The international ranking is a widely debated example of how measurements have influenced university management and operation in a way that differs from the past (Marginson, 2011). For example, universities need indicators to show the international impact of their research and their popularity with international students. Third, the emergence of an accountability culture in higher education based on evaluations has also pushed the agenda (Beerkens et al., 2010). Information needs to be provided to help inform students, academics, and other stakeholders to what extent an institution is internationalised. The need to provide the public with reliable information is not only a matter of reputation but also reflects an increased demand for transparency. As internationalisation requires a substantial commitment of institutional resources, and perhaps an opportunity cost in some other areas, 'knowing objectively and in measurable terms that it produces value in the intended directions becomes critical in garnering support beyond rhetoric (Hudzik & Stohl, 2009, p. 12).'

Studies on developing measurements for university internationalisation

Over recent decades, research involving the development of instruments for measuring university internationalisation has gained increasing attention. The first endeavour to assist universities in assessing and improving the quality of their internationalisation activities was the *International Quality Review Programme* (IQRP) developed by the Institutional Management in Higher Education (IMHE), OECD together with the Academic Cooperation Association (ACA) (Knight & de Wit, 1999). Subsequently, there has been a considerable growth in the number of studies and projects that attempted to develop measurements of internationalisation in decade thereafter. Not surprisingly, in the beginning the studies were conducted in countries such as the U.S. (e.g. Green, 2005; Horn, Hendel, & Fry, 2007), U.K. (e.g. Ayoubi & Massoud, 2007) and Australia (see Krause, Coates, & James, 2005), where internationalisation gained more importance due to the increasing flow of foreign students. Attempts were also made in European countries such as France (e.g. Echevin & Ray, 2002), the Netherlands (e.g. de Wit, 2009) and Germany (e.g. DAAD, 2010). In addition, there has also been an increasing interest in assessing internationalisation performance in East Asia, particularly in Japan (see the study of Furushiro, 2006), Taiwan (see Chin & Ching, 2009), and Mainland China (e.g. Chen, Zeng, Wen, Weng, & Yu, 2009).

These studies imply that the less tangible concept of internationalisation can be constructed by identifying the key domains of internationalisation practice that can be measured. In these studies, either a set of indicators or rubrics were developed to help capture different components of university internationalisation. For example, Paige's (2005) study proposed 80 indicators to measure ten elements of university internationalisation. Krause et al. (2005) analysed 38 Australian institutions' web pages and developed 66 indicators to capture 17 components of internationalisation. Osaka University in Japan launched a project to develop evaluation criteria for the internationalisation of Japanese universities, using an 'a la carte menu' of rubrics to reflect 23 elements. The study that was conducted by Brandenburg and Federkeil (2007) developed indicators to assess 20 thematic areas of university internationalisation, which were then clustered into three main dimensions. By crosschecking the identified components in different studies, it confirms the existence of common elements of university internationalisation. Specifically, 16 measurable components have been acknowledged in most studies as indicative of the extent to which an institution has engaged with internationalisation. These components can be grouped to reflect six key dimensions of university internationalisation, as shown in the figure below.

Table 1: Measureable components of university internationalisation

Dimension	Component
Governance & organisational support	Human resources for international activities
	Financial support for internationalisation
	International presence
Student	International students
	Mobility of students
Faculty	International profile of the faculty team
	International experience of faculty
Curriculum	Courses with an international component
	Joint degree programs
	Students' participation in international studies
Research	Internationally cooperative research programs
	Internationally focused research centres
	International researchers
	Internationally acknowledged research achievements
Engagement	International network and partnership
	International presence of alumni

The identified common components of university internationalisation in previous studies indicate the structural and philosophical similarities in a variety of institutional practices about internationalisation. These generic values and strategies allow meaningful comparisons to be made between universities in relation to internationalisation. Although considerable efforts have been made to develop measures for internationalisation, little has been known about how internationalisation performance is assessed in individual universities. In other word, whether these established instruments have been applied to help university leaders to monitor their performance in terms of internationalisation has yet been explored.

Research questions

In order to fill the gap identified above, this study intended to investigate how internationalisation is currently being monitored and measured in universities. Specifically, two questions were developed to steer the investigation:

1. In what way is university internationalisation performance being measured in individual universities?
2. What are the difficulties in measuring university internationalisation performance?

Methodology

Field interviews were employed to collect the data for this study. In-depth interviews are flexible and adaptable to individual situations (Davies, 1997). They provide actual words of participants, offering many different perspectives on the topic being studied. During the interview, open-ended questions are used so that interviewees can best voice their experiences unconstrained by any perspective of the researcher or past research findings (Creswell, 2012). They permit probing into the context of, the reasons for, and answers to questions about beliefs and concerns. The interviews were semi-structured in nature. A purposive sampling was adopted to identify the interviewees. By using this sampling method, "particular setting and persons are deliberately selected for the important information they can provide that cannot be gotten as well from other choices" (Maxwell, 1996, p. 87). The final sample of interviewees consisted of 11 Pro-Vice Chancellors (PVCs) of international and 4 Directors of International Offices from 15 elite research universities in Australia and China (9 universities in Australia and 6 in China). To fully protect the participants' confidentiality, the names of universities will be referred to by a pseudonym in any publications. Elite research universities were selected because they are the most active and powerful players in the process of internationalisation compared to other types of universities (Geuna, 1998). Universities in China and Australia were selected because they provide distinctive national contexts to examine the phenomenon. And they differ in terms of status towards internationalisation and the focus of international strategy. The distinctions between them enrich the perspectives on the phenomenon being studied.

Interviews were conducted in the native language of the interviewees because their responses would be fuller and more nuanced in native language. Language is after all a tool for constructing reality (Spradley, 1979, p. 17). The length of the interview was flexible. The longest lasted 2 hours; the shortest was 45 minutes. All the interviews were audiotaped and the recordings were transcribed. Thematic analysis (Creswell, 2012) was used to analyse the qualitative data collected through interviews. The data were scrutinised and coded to the identified main themes. Generally, the thematic analysis was a classification system to provide insights regarding the frequency and patterns of factors that affect the phenomenon of interest.

Importance of measuring university internationalisation performance

The findings of the study show that among the 15 sample universities, 8 universities are using specific measurements to monitor internationalisation performance. Another five have statistics in relation to internationalisation to various degrees. However, the records do not serve the purpose of assessment or informing policy and practice. There is no assessment for internationalisation in the other two universities. They show interest in better monitoring performance; however, the interest has yet been transformed into practice. Irrespective of the stage the universities have reached with regard to measuring internationalisation, almost all of the interviewed university policy makers confirmed the importance of having measurements of internationalisation to position oneself and inform evidence-based decision-making. One of the PVCs commented:

> We use these evidence-based data to inform the approach to our global strategy. For example, it is very powerful if I want to change the funding support for outbound mobility. By looking at the profile of all the students going abroad, we will say that a differential monetary support should be given to students from disadvantaged backgrounds because they need to be given that opportunity, you know, access. The data of who is doing what, where and why give me the strategic levers to shift strategy. But I can't do without data (Interview A, Australia).

Another PVC approved of this view, saying that:

> We spent a lot of time on tracing recruitment because they're drivers of every university. I also would like to know what the companies are thing, what the governments are thinking and then we could fulfil them. We measure everything that we could measure. We're trying to get more management information, which can help us make decisions (Interview G, Australia).

Defining measures for internationalisation would certainly help to guide activities in more established

universities. It could also be of great value to universities that have yet to find their place in the world. As one interviewee suggested, 'Indonesia or Vietnam or Cambodia government will pay for consultancy for telling them what their three hundred new universities should be doing in terms of monitoring internationalisation (Interview B, Australia).' Moreover, the information provided by measurements could be used by universities to identify the problems in their current practice in relation to internationalisation, as illustrated in the statement that 'the data help us identify the pattern of our international practice, which show that it is biased to advanced science and technology country partners. It is biased to English speaking countries (Interview A, China).

How is internationalisation performance being measured in universities?

In universities that developed measurements or statistics for internationalisation, two approaches to conduct the assessment are evident. One is the quantitative dominated approach, which uses performance indicators as the main instrument for collecting data. The other is a mix of qualitative and quantitative approaches. In this approach, both indicators and surveys are employed to gather information in relation to different aspects of internationalisation performance. Different indicators have been developed by universities as proxies for internationalisation achievements. In one of the sample universities, 13 indicators were built to measure international collaboration. They are student exchange, study abroad, course work, and recruitment (for volume and range of source countries) and sponsorship. Graduate students, sponsorship, joint PhDs, alumni from partners are used to measure the activities of engagement. With regard to research, joint publications and joint projects are the indicators (Interview A, Australia). Other institutions may employ a different set of indicators. For example, as one PVC stated:

> On monitoring, we always start with the international students, which are monitored on a daily basis. We look at how many students had applied. Where are they coming from? In terms of study abroad we monitor that by counting how many students were sent out. I don't pay attention to how many are coming in since I don't really care. What I care about is how many we get out. And I look at that probably three times a year because we send them out in big adventures. About international research collaboration, we have got two variables as our benchmarks. One is percentage of co-publications with non-Australian publishers and the other is amount of research funds raised by non-Australian sources. I'm also interested in number of MOUs, number of research agreements and I also keep an eye on some really big projects we have (Interview I, Australia).

In most universities in China, assessing internationalisation performance is part of the annual education evaluation. Every year the central office of the university evaluates the academic performance of schools and departments, and internationalisation forms different proportions of the overall evaluation. Several indicators are collected to generate an overall score of a school's internationalisation performance. The indicators usually include international conference, outbound mobility of faculties, visiting scholars, student exchange, co-publications, joint courses and joint degree programs (Interview C & D, China).

In two other universities in China, the situation is slightly different as both of the Directors mentioned internationalisation is not being measured in their institutions. However, they have established relatively comprehensive statistics of international activities. These descriptive data are collected annually and reported to the President. Instead of serving an informative purpose or being used for guiding the target setting, the information is only regarded as a summary of their work in relation to internationalisation (Interview B & E, China).

Indicators are powerful in gathering information about institutional internationalisation performance, particularly of components that can be easily quantified and captured by numbers. For elements that deny quantification, qualitative information needs to be collected through surveys or program reviews, as illustrated by this statement:

> We conduct reviews of all units involved with international activities. The reviews are looking at how appropriately the units are structured and how appropriate their policies are

> to contribute to the university internationalisation. That review is not saying that you only have 5,000 international students and that is bad. It is saying do you have effective mechanism for communicating with schools to help them recruit students and the answer is no. (Interview B, Australia).

This approach is adopted in other universities. In one investigated institution, a range of systemic review reports about internationalisation is generated annually. There is input from all the schools and all the central divisions on their internationalisation strategies, and their comments on the international plan. A panel, consisting of 8-10 people, digests and discusses the information. The chair of the panel produces the report that will go to the senior executive (Interview F, Australia).

In exploring the experience and satisfactions of students and staff, surveys are employed to obtain feedback. 'Staff surveys are used to assess staff responses to our institutional strategies to see whether people believe in our institutional strategies and are supportive of it (Interview E, Australia).'

Other than the established measurements of internationalisation, interviewees were also asked to identify the measures of other components they are looking for. They expressed their interest in capturing information about short-term outbound mobility of academic staff, appropriate measures for internationalising students' experience and the way to capture the work they do overseas in capacity building countries which is funded by different bodies.

Difficulties in measuring university internationalisation

Although various instruments have been developed to help visualise and measure university internationalisation, barriers that impede the establishment of effective assessment were highlighted by the interviewees. One major obstacle in measuring internationalisation is the availability of the data, particularly in universities in Australia, where the management system is more decentralised. Most international activities like research collaborations and faculty exchanges take place in individual schools and departments. It is a challenge for university central offices to trace and record those activities. This challenge is demonstrated in the statement below:

> Because the operation of the university has been so decentralised, I think there are lots of happens without the central university knowing about them. You will hear one day that a senior minister of the government visits one of our schools. And I can easily get angry with that. There is nobody tells me that there is a minister on the campus from a foreign country. But in a way that the facts happen in the first place means that the connection the school has or the reputation of the school is so high quality that the minister would travel there and visits the school without university knowing about it (Interview B, Australia).

In addition, some interviewees showed their concerns about the appropriateness and quality of the proxies of internationalisation. Because of the nature and characteristics of some disciplines, indicators may not be high-quality or meaningful proxies for the real performance of internationalisation in a given institution. For example, the number of international publications has been commonly used as a measure; however, it tells us very little about the internationalisation of research where that the university has researchers who are involved in mass physics projects like CERN or in physics publication with over 200 authors. They produce hundreds of papers a year, but there is not necessarily any deep collaboration. For those multi-billion dollars research projects, anyone involved in any way becomes the author on the paper. In this regard, weight has to be applied to almost all the multi-authored papers or the number should be refined in discipline analysis before it can be used to draw any meaningful conclusion about the internationalisation of research of a university (Interview F, Australia).

Even the indicator is a qualified proxy for internationalisation the terminology can be problematic. A straightforward indicator can indeed be understood and calculated in a variety of ways. The variations or ambiguities in the wording of some indicators are a cause for concerns. If the data were produced by different definitions, they would result in unreliable, and perhaps, quite erroneous conclusions about university internationalisation, particularly in making comparisons between institutions. As one

of the interviewed directors stated, international faculty is a tricky concept. It can be defined by nationality, by the primary language used by the staff or by the place of birth. In the case of China, whether the foreign citizens of Chinese origin should be taken into account is also a problem (Interview C, China).

A Director from China shared his understanding of the reason why there are no measurements of internationalisation implemented in his institution. He argued that, because of the complexity of internationalisation and the various factors exert the influence on university internationalisation performance, even with the data it remains puzzling to diagnose the responsible party for the problem, as illustrated in the statement below:

> Even you have the measures and when you look at your data, and you look at your performance, it is very difficult to figure out who should be blamed for or who should get the credit. For example, the number of international visiting scholars is determined, to some extent, by the financial resources the university can provide. The outbound mobility of students is another example. It also subjects to the availability of financial resources as well as the quota that the university can get from some national schemes, which is beyond the control of the university (Interview F, China).

Discussion: measuring internationalisation performance, the urgent challenges university leaders encounter

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