Chapter 9
Analyzing the Disciplinary Focus of Universities:
Can Rankings Be a One-Size-Fits-All?

Nicolas Robinson-Garcia
Universitat Politècnica de València, Spain

Evaristo Jiménez-Contreras
Universidad de Granada, Spain

ABSTRACT

The phenomenon of rankings is intimately related with government interest in fiscalizing the research outputs of universities. New forms of managerialism have been introduced into the higher education system, leading to an increasing interest from funding bodies in developing external evaluation tools to allocate funds. Rankings rely heavily on bibliometric indicators. But, bibliometricians have been very critical with their use. Among other, they have pointed out the over-simplistic view rankings represent when analyzing the research output of universities, as they consider them as homogeneous ignoring disciplinary differences. Although many university rankings now include league tables by fields, reducing the complex framework of universities' research activity to a single dimension leads to poor judgment and decision making. This is partly because of the influence disciplinary specialization has on research evaluation. This chapter analyzes from a methodological perspective how rankings suppress disciplinary differences which are key factors to interpret correctly these rankings.

INTRODUCTION

In the last five years, we have observed a rapid transformation in the way research policymakers use university rankings. These tools have rapidly been integrated as a new support tool on which to base their decisions. They have reshaped the higher education landscape at a global level and become common elements for politicians and university managers' discourse (Hazelkorn, 2011). Not only have they become external key factors as a means to attract talent and funds, but they are also used as support tools along with bibliometric techniques and other methodologies based on publication and citation data (Narin,

1976). Their heavy reliance on bibliographic data has stirred the research community as a whole, raising serious concerns on the suitability of such data as a means to measure the 'overall quality' of universities (Marginson & Wende, 2007). At the same time, university rankings have caught bibliometricians off guard. Although they use them quite often (i.e., journal rankings), they have traditionally disregarded them for institutional evaluation, focusing on more sophisticated techniques and indicators (Moed et al., 1985). On the other hand, university rankings have been traditionally based on survey data and have not considered the use of bibliometric indicators until recently. Moreover, despite their success in the United States, they have had little presence in the European research policy scenario (Nedeva, Barker & Osman, 2014).

The launch of the Shanghai Ranking in 2003 did not only set up the starting point of the globalization of the higher education landscape, but introduced bibliometric-based measures to rank universities. Surprisingly, the Shanghai or the Times Higher Education World University Rankings and QS Top Universities Rankings were not produced by bibliometricians, not even by practitioners. From the beginning, this caught the interest of the bibliometric community which rapidly positioned themselves against the use of these tools. Such strong opposition is resumed in the correspondence maintained between Professor van Raan from Leiden University and the creators of the Shanghai Ranking (Liu, Cheng & Liu, 2005; van Raan, 2005a; van Raan, 2005b). Here, van Raan (2005a) highlights serious methodological and technical concerns which are later emphasized by others (i.e., Billaut, Bouyssou & Vincke, 2009). Such shortcomings have to do with the careless use these rankings make of bibliometric data, neglecting many of the limitations bibliometric databases have, and offering compound indicators of dubious meaning which intend to summarize the global position of universities.

Rankings have evolved from marketing tools which have a great impact on the image of universities and their capacity to attract talent and funds (Bastedo & Bowman, 2010) to research evaluation tools which are used strategically by research policymakers shaping their political agenda (Pusser & Marginson, 2013). However, their strong focus on research and their reliance on bibliometric data, entail important threats and misinterpretation issues which may:

1. Endanger the institutional diversity of universities, and
2. Misinform policymakers on the performance of universities or national higher education systems.

Considering that most university rankings analyze basically the research performance of universities defined as their publication output (Marginson & Wende, 2007), this chapter discusses the threats the use of university rankings impose to the disciplinary profile of universities. The main thesis is that rankings still offer a restricted view of the research performance of universities, despite the professionalization and rigorousness they have developed in the last few years; converging into research evaluation systems and offering different league tables and a wide range of indicators. Also, the recent trend towards the provision of a wide range of sophisticated indicators (i.e., Centre for Science and Technology Studies, 2015) introduces tensions with the demands of policymakers towards easy-to-use evaluation tools. As a proposal, the use of science mapping and visualization techniques are proposed making use of the information provided by rankings as a means to surpass such tension between what bibliometricians can develop and the demands of research managers.

The aim of this essay is twofold. First, it intends to provide a deep and critical analysis and understanding of the methodological decisions implied in university rankings with regard to the type of data

23 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage:
www.igi-global.com/chapter/analyzing-the-disciplinary-focus-of-universities/168185

Related Content

Digital Badge Use in Specific Learner Groups
Jacob H. Askerothand Timothy J. Newby (2020). *International Journal of Innovative Teaching and Learning in Higher Education (pp. 1-15).*
www.irma-international.org/article/digital-badge-use-in-specific-learner-groups/245769

Incremental Learning in a Capstone Project: Not All Mature Students Are the Same
John McAvoy, Mary Dempseyand Ed Quinn (2020). *International Journal of Innovative Teaching and Learning in Higher Education (pp. 1-15).*
www.irma-international.org/article/incremental-learning-in-a-capstone-project/260945

In Sync: Online Learning in Teacher Education at an HBCU
Yolanda Lyght Dunston (2016). *Setting a New Agenda for Student Engagement and Retention in Historically Black Colleges and Universities (pp. 152-171).*
www.irma-international.org/chapter/in-sync/157929

Using Experiential Learning to Improve Student Attitude and Learning Quality in Software Engineering Education
Ferdinand Ndifor Che, Kenneth David Strangand Narasimha Rao Vajjhala (2021). *International Journal of Innovative Teaching and Learning in Higher Education (pp. 1-22).*
www.irma-international.org/article/using-experiential-learning-to-improve-student-attitude-and-learning-quality-in-software-engineering-education/273133

Peacebuilding as a Means to Global Citizenry
David J. Smith (2019). *Study Abroad Opportunities for Community College Students and Strategies for Global Learning (pp. 200-212).*
www.irma-international.org/chapter/peacebuilding-as-a-means-to-global-citizenry/219835