



Defining the Concept of University for Research Benchmarking

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When benchmarking university research performance the data used must represent similar, meaningful entities in order for comparisons to be of value. There would be little sense, for example, in comparing the research output of a single university with that of an entire university system. Internationally there is currently no standard for identifying what is and what is not a component part of a university. Indeed there is not even a standard definition of the term university. Even within some countries there are no clear definitions of what makes up a university. Due partially to this fact, the data available for benchmarking research performance (e.g. publications and citations) is not organized in a way that allows one to quickly identify an institution and make meaningful comparisons. Thus a definitional framework for the concept of university is a prerequisite to carrying out any useful benchmarking exercise. This document discusses fundamental operational and organizational features central to the concept of university as a research entity and then pulls these together into a definition and shows how the definition applies to several challenging examples.

A “campus” is an important concept for universities in many countries. The campus defines geography, a location that in some original sense represented the institution. When colleges and universities were small and self contained, the notion of college and campus coincided. With the advent of large single institutions, remote branch locations, and multiple-institution university systems, the precision of the concept of campus coinciding with university blurred. Many large universities have separate campuses in the same city, sometimes physically connected sometimes not. University at Buffalo, for example, has two campuses separated by three miles while Fudan University has four locations in Shanghai. Even when the physical space of the university is contiguous, such as the University of Michigan at Ann Arbor,

people speak of the medical campus, the north campus, the south campus, and the central campus. Many observers still use the term “campus” to refer to a university that may have two or more distinguishable physical locations where it delivers its programs. For the purposes of benchmarking, institutions with multiple physical locations can be considered single institutions so long as they operate under the same academic management and standards.

If the definitions used for single institutions are difficult, imagine the naming challenge for systems, groupings of institutions in the complex governance organizations discussed here. Although, for various political and administrative reasons, systems of institutions choose different naming conventions, we treat all of them as systems. Sometimes, as is the case of the University of California or the University of Philippines, the rhetorical language implies one university existing in many different locations. This concept has some validity related to the formal authority of the system, but in practice individual campus-based institutions within the system function in ways that mimic single campus universities. The key participants for universities – faculty and students – live and work primarily in one place and their academic lives and accomplishments revolve around mostly place-bound resources and activities. The campus locations also identify the universe of individuals who participate in decisions about the quality of research and the content of the teaching program. Recruitment of faculty and students and promotion and tenure decisions about faculty usually reflect primarily place-specific criteria, even when the system is styled as a single university with multiple campuses. Students and faculty make choices related to campus location, not system designation. In California or Massachusetts, a student or faculty member affiliates with Berkeley or UMass Amherst, not with the University of California or the University of Massachusetts writ large, even though systems have their own characteristics that may enhance or detract from the desirability of campuses. Some university systems seek to present themselves as a single university with multiple locations as a way to show the system’s assets as a single large resource rather than as the disaggregated and less impressive subtotals of the individual campuses. Some systems also promote the notion of a single university for statewide political purposes or in marketing their programs internationally. But, for the purposes of comparing research performance, treating a university system as a single institution distorts the data, making meaningful performance comparisons impossible.

Another distinction involves the branch campus. While university systems may coordinate or govern multiple university campuses with relatively autonomous academic decision-making authority, many individual institutions (standing alone or within systems) also have branch campuses. Branch campuses generally depend heavily on the parent campus for academic direction, usually do not have autonomous academic personnel decision-making authority for promotion and tenure, and often provide only a subset of the full curriculum offered by the parent. If a branch campus does have autonomous academic authority it should be considered a separate institution.

In some cases, campuses may be relatively close together but have separate research operations. For example, the University of Kansas has campuses in Lawrence, Kansas City, Overland Park and Wichita. A Chancellor heads the university with executive vice chancellors who in practice head up the Lawrence campus and Kansas City Medical Center. The Lawrence and Kansas City campuses have separate vice

chancellors for research. And, they have separate faculty governance bodies. Therefore, the Lawrence and Kansas City are considered to be separate institutions.

Definition:

The purpose of this definition is to identify the core operational institutional entity that drives research performance and that will be used as the fundamental entity for the purpose of gathering data for research benchmarking . This is based on an underlying concept that locates the source of research competitiveness in the academic institution and its faculty. We use the institution to define the group of faculty and other research personnel who are responsible for the research productivity and quality associated with the institution. The key drivers of research performance include faculty quality and faculty research profile, standards and expectations for faculty research performance, faculty workload composition, graduate student quality (primarily of importance in science and technology), institutional resources (library, etc), and institutional research strategy. We look to identifying the location and institutional scope of the people, policies, structures, and processes that establish these drivers.

For the purposes of university research benchmarking, we use the term “university” to apply to a single institution that has substantially independent academic decision-making authority whatever the title of the chief executive officer. It admits students either with reference to its own local standards or through a national system for student admission. These institutions hire, promote, and tenure faculty through processes that substantially rely on locally referenced standards. They typically have a strategic plan that addresses issues of research quality and focus. They also typically have an administrative position such as vice president for research or dean of research that is responsible for research strategy and management of research funding. Where an institution is geographically separate and has independent academic decision making then it is appropriate to consider that campus as a separate institution. The university as here defined is the fundamental entity for the purpose of gathering data for benchmarking.

Branch campuses even though geographically separated from the main campus are considered as part of the university when they depend on the parent campus for academic direction, do not have autonomous academic personnel decision-making authority for hiring, promotion and tenure, and provide only a subset of the full curriculum offered by the parent. If a branch campus does have autonomous academic authority it is considered a separate institution.

Examples:

University system – The University of California (UC) is a system of institutions with a high degree of autonomy. Although the UC System has a governing board and system president, individual campuses are run by chancellors who exercise substantial local authority over each institutions academics and research. Therefore, we treat the University of California – Berkley and the University of California – Los

Angles as separate, distinct institutions even though they are both part of the University of California writ large.

Branch campuses – The Pennsylvania State University (Penn State) has more than 20 branch locations. Although these campuses operate under President of main campus, they admit students using their own local criteria and promote faculty and grant tenure using local standards. Although the leader of many of these branch campuses hold the title of dean, their authority is similar to that of the chief executives of individual campuses in a multi-campus system. Therefore, these branch campuses are treated as distinct institutions.

University with multiple physical locations – Arizona State University has four campuses in the Phoenix, Arizona metropolitan area. These campuses do not operate as independent entities. Admissions standards are standard across the campuses with the only variation based on program. Students can and do take classes at more than one of the campuses. The University Senate is made up of representatives from all four physical locations. Therefore, Arizona State University is treated as a single institution.

External research lab on campus – The California Institute of Technology houses the Jet Propulsion Laboratory (JPL). This lab was originally created by Cal Tech, a private, not-for-profit institution. Today, JPL is operated as a federally funded laboratory managed by Cal Tech under a contract for the US National Aeronautics and Space Administration (NASA). Federally funded laboratories are considered to be separate entities by the National Science Foundation. These laboratories conduct research only and do not offer instruction. Therefore, we consider JPL to be a separate entity and not part of Cal Tech for benchmarking purposes.

University with a remote research station – Montana State University is the State of Montana's Land Grant Institutions and therefore runs several agricultural research stations across the state. These experiment stations are used for research and to investigate and solve problems in the state's agriculture industry. These research stations are control by the main campus in Bozeman. The research agenda is directed by faculty from the main campus. Therefore, we consider these research stations to be part of Montana State University.