

International Cooperation and Mentoring: An Academic Obligation? Current Trends in the Internationalization of Higher Education

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International Cooperation and Mentoring: An Academic Obligation?

Current Trends in the Internationalization of Higher Education

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1. Unviersity and society in Latin America

Even considering the great differences that can be found within the region, there are elements to support the idea of the existence of common traits in Latin American universities. One of their main common characteristics is linked to their historical background. Latin American universities have followed the Napoleonic model to a greater extent than the Humboldtian model of institutions. Its main function was to provide training in the liberal professions -doctors and lawyers- and not (as in France) to train high ranking civil servants. In countries such as Argentina, the university degree conferred a higher social status and contributed to upward social mobility. University-society relationships promoted by this kind of institution are mainly related to teaching and professional training. Law and Medicine schools become predominant and this has effects on the profile of the faculty within the whole institution, which are mostly employed part-time by the university. This has also hindered the development of graduate studies, which were not deemed necessary for professional development. (Arocena and Sutz 2001a).

Research activities, considered one of the pillars of modern university (Wittrock 1993), are also present in Latin American institutions. Humboldtian ideals of unity of research and teaching, academic freedom for teachers and students and the pursuit of pure knowledge, had a focalized influence within some institutions and periods of history in Latin American universities, but the local situation is far different from the American development of 'research universities' (Arocena and Sutz 2001a, Clark 1995, Morgan 2011). University-society relationships related to research must be thought of differently to those based on teaching. According to the linear model of innovation, basic research -carried out in universities and other academic institutions- is the pacemaker of technological progress, which has a direct impact in society (Bush 1945). This mediate, rather than immediate, link with society resulted in the production of a disciplinary academic knowledge that contributed to the image of university as an *ivory tower*, a place isolated from the needs of the surrounding world.

This viewpoint, based upon the linear model of innovation, was challenged in the last decades of the 20th Century by a new way of conceptualizing university-society relationships. From this point of view, "society" should be primarily understood as industry and the aim of these interactions was conceived of as the contribution to wealth creation through technological innovation. This proposal is not value-neutral, these linkages are not just a fact that is analyzed, they are opportunities worth exploring since the benefits could exist for both parties. According to this

proposal, industry could optimize its processes and add value to its products and universities could profit through increased visibility and economic earnings. The benefits of these associations might also exceed both parties because the economic structure of the whole region or country would increase its competitiveness and generate endogenous development (Etzkowitz and Leydesdorff 2000). The imperative of relevance for higher education imposed by Gibbons (1998) is directly related to the production of knowledge useful to users who can afford its development. It is according to these paymasters' interests that the university research agenda should be guided. University should be reorganized and should itself become *entrepreneurial* to be able to satisfy these demands also at a organizational level (Clark 1998).

In Latin America these global changes have been translated into the neoliberal higher education policy agenda of international organizations such as the World Bank. Their recommendations included the diversification of university funding (the reduction of public expenditure) through contracts with industry and tuition fees for graduate and undergraduate students (Naidorf 2009). However positions can be found that seek a balance between the possibility of economic development and the commodification of knowledge and university. Universities should contribute to national socioeconomic development and not be co-opted by particular corporate interests. The main obstacle to these perspectives within the region remains the unwillingness of local industrialists to engage in innovation activities (Arocena and Sutz 2011).

2. The international dimension

Although international relationships were always part of academic work, in the recent decades globalization processes have brought the international dimension of university activities to the forefront. Several authors discussed the idea of the "Internationalization of Higher Education".

There are many levels in which internationalization takes place. First, we can speak about the internationalization of the substantives missions of the university, such as teaching, research, outreach and knowledge transfer. Second, there is also an internationalization in the "identity" and strategic positioning of the institution as a whole. Third, it involves the competencies that the human resources of the institution (faculty, students, staff) have to master in order to be successfully active in the global sphere.

Knight and de Wit (1995) distinguish between four approaches to internationalization: activity, competency, ethos, and process.

Activity approach: The activity approach describes internationalisation in terms of categories or types of activities. These include academic and extra-curricular activities such as: curricular development and innovation; scholar, student and faculty exchange; area studies; technical assistance; intercultural training; international students; joint research initiatives.

Competency approach: The competency approach looks at internationalisation in terms of developing new skill, attitudes, knowledge in students, faculty and staff. The focus is clearly on the human dimension not on academic activities or organisation issues.

Ethos approach: The third approach focuses on developing an ethos or culture in the university or

¹ See Kitcher (2003) for the concept of paymasters in science policy.

college that values and support intercultural and international perspectives and initiatives;

Process approach: The process approach frames internationalisation as a process which integrates an international dimension or perspective into the major functions of the institution. Terms such as infuse, integrate, permeate and incorporate are used to characterise the process approach. A wide range of academic activities, organisational policies and procedures, and strategies are part of this process.

3. Internationalization of the substantive missions of unviersity

3.1. Teaching

The internationalization process affects all of the main substantive missions of the university. In teaching, many opportunities for international actions are available. One of the key is student **mobility**. It helps students adopt a more international "ethos" as well as contributing to the enlargement of their cultural values and academic competencies when they go abroad. Inbound mobility is also very important for institutions. Having international students as guests also transforms the identity of the university and fosters the same values and competencies, even for local students that do not participate in exchange programs. It also presents a challenge for professors and teaching staff since they have to adapt their classes to students with different cultural and academic (and linguistic) background. This also helps teachers to reconsider how to teach for a global audience. Some programmes, like the European ERASMUS, have contributed greatly to the consolidation of a "European" citizenship and identity. The Latin American region, although it has advanced in some cross recognition of studies, it still lacks a large-scale initiative. MERCOSUR or other regional integration schemes might have the institutional capacity to design such a programme. A further step towards institutionalizing international teaching programmes is the planning of **joint or double degrees** with universities from other countries.

Virtual education also provides a great new opportunity for internationalization. Virtual courses or degrees might be taken up be students outside the universities' home country. Teaching contents can be adapted to that enlarged audience. Virtual education provides also a new economic opportunity since it might be a way to increase revenue from courses with a big one-time investment. The latest trend are the **Massive Online Open Courses (MOOCs)**. The courses offered are generally free (or with payment for premium features such as verified ID checks), and open to anyone interested. Some of them derive from in-campus courses but are specifically adapted to the online environment. Certification of achievement is based on a honor code, and only recently ID verification techniques were included as a premium feature. American universities have been entering this market, and today many courses are offered in Coursera (Stanford, UC, Duke, Princeton) and edX (MIT, Harvard). Interaction with teachers assistants is possible but not encouraged by the platform and the kind of contents provided. Usually staff is not as available to students as in paid virtual education. Grading of submissions is also automated or requires very little teacher involvement. Credit towards a degree is not usually granted for MOOCs. Nevertheless they have been very popular in the last years.



MOOCs rising $Over \ little\ more\ than\ a\ year,\ Coursera\ in\ Mountain\ View,\ California-the\ largest\ of\ three\ companies\ developing\ and\ hosting$ massive open online courses (MOOCs) — has introduced 328 different courses from 62 universities in 17 countries (left). The platform's 2.9 million registered users come from more than 220 countries (centre). And courses span subjects as diverse as pre-calculus, equine nutrition and introductory jazz improvisation (right). **Student origins Courses offered** Supply and demand Number of courses 6% Mathematics 30% Science available on the platform 27.7% United States 13% Business Number of user accounts on the platform (millions) 4.4% United Kingdom 5.1% Brazil 350 3.5 4% Spain 300 -250 200 3.6% Canada 150 2.3% Australia 2.2% Russia 100 0.5 41.9% Rest of world 23% Information 28% Arts and

Scientific American, http://www.scientificamerican.com/media/inline/massive-open-online-courses-transform-higher-education-and-science 3.jpg

3.2. Research

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Research is also very important for an institution that wants to become "international". It is one of the main characteristics of academic research to be freely communicated and open to international scrutiny. It was Michael Polanyi who in the 1960s claimed that there was only one "Republic of Science" that transcended national borders:

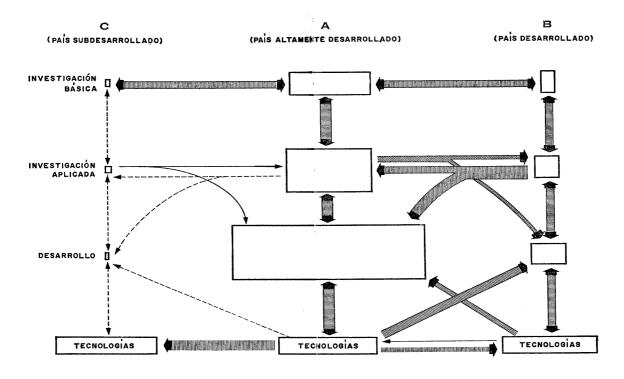
The Republic of Science shows us an association of independent initiatives, combined towards an indeterminate achievement. It is disciplined and motivated by serving a traditional authority, but this authority is dynamic; its continued existence depends on its constant self-renewal through the originality of its followers. The Republic of Science is a Society of Explorers. Such a society strives towards an unknown future, which it believes to be accessible and worth achieving. In the case of scientists, the explorers strive towards a hidden reality, for the sake of intellectual satisfaction. And as they satisfy themselves, they enlighten all men and are thus helping society to fulfil its obligation towards intellectual self-improvement. (Polanyi, 1962)

However inspiring or romantic this vision may be, "national" or local interests in the development of research activities have played always a key role (Weinberg 1968). Particularly the vision of science policy-makers differs in this regard with the perspective of scientists. While the latter usually advocate for a curiosity-driven research agenda, the former tend to define national priorities in terms of economic competitiveness or societal needs that should inform research activities.

At the university level, one key instrument for internationalization is the participation of the research groups of the institution in **international research networks**. This usually leads to enhanced access to funding and high-quality publication opportunities. In the later years, the European Union's Framework Programmes opened their calls to the participation of groups from developing countries. The opportunity to build long-term ties and work with top standards is naturally attractive to scientists in underdeveloped countries. But this often overlooks the importance of the definition of research agendas. Funders tend to impose the issues that should be addressed first, and this is entailed from the discussion of national priorities. The EU H2020 programme states as one of its objectives: "Strengthening the EU's global position in research, innovation and technology". With this, I do not want to dis-encourage international collaboration.

My point is just to remind that **the "bigger picture" of science funding usually incorporates a clear geopolitical dimension**, that is sometimes not completely acknowledged or recognized by scientists themselves, that tend to think as if we were living in the "Republic of Science".

This idea of knowledge asymmetries is usual in every discussion about integration between different nations and also in the area of R&D and innovation. In Latin America in the 1970s, authors from a movement called the "Latin American Thought on Science, Technology and Development". Amílcar Herrera (1971), an Argentinian geologist based in Brazil, criticized the research policy models based upon the supply of knowledge. He asserted that these policies, that were supported by the regional UNESCO office, stimulated the consolidation of ties of economic and cultural dependence, which blocked more autonomous thinking about the most adequate scientific development for each Latin American country. "The structure of current scientific development is determined by the directions imposed by the needs of the most advanced countries and not by a 'natural law' that inexorably determines the characteristics of scientific growth. To blindly imitate these models for development means to become a subsidiary in a system conceived for other needs" (1971, p. 92).



Finally, besides participation in international networks, faculty mobility is also key. The possibility for professors to develop research stays abroad is very important to foster the growth of international competencies. However it is more frequent that professors from developing countries stay in developed countries than having long-term "visiting Professors" from developed countries. It might be important to promote the establishment of "visiting positions" at universities in developing countries as a mean to make use of the experience of the foreign professors for longer periods (it is usual to have short-time visits for courses or seminars).

3.3. The "third mission"

The "third mission" of universities is not defined as clearly as the first two (Larédo 2007). The

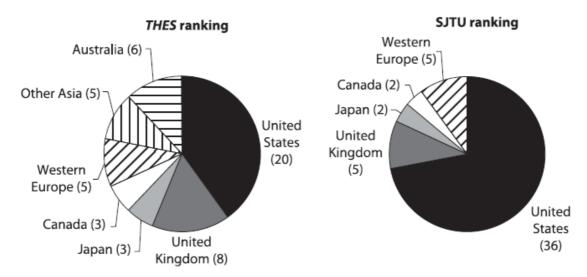
"thrid mission" is related to how the university interacts with actors beyond the academic community. It is connected to processes of "knowledge transfer" and innovation together with the private sector. This has arisen many critiques from scholars that termed this "academic capitalism" or a "privatization of science" (Mirowski 2011, Slaughter and Leslie 1997) On the other hand, many authors have praised this transformation of the university and regarded this as an "entrepreneurial" turn that renewed a traditional institution (Clark 1998). The internationalization of this kind of activities is part of the new knowledge economy where intellectual property protection should be done at a global level (involving mainly USPTO, EPO and Japan) and therefore the innovative products that may be derived from university research might also have a global impact.

This "third mission" however is not limited to the innovation activities, it also includes what traditionally was termed "outreach" [or in Spanish *extensión*]. This mean not-for-profit activities of knowledge dissemination and broader cultural activities. Although normally in Latin America this is linked with fostering local development and helping the poor, it can also adopt an international perspective if the partnering occurs at the **Global Civil Society** level (NGOs with global impact). The cultural outreach activities can also adopt a global perspective with new IT technologies, delivering content and promoting university research, projects and staff beyond the national scene.

4. World-class world wide: Is there a universal model of university?

The process of internationalization also transforms the ideal models of what a university should be. Traditionally, in each national configuration the model of university varied greatly. The American culture always emphasized institutional differentiation and competition while other system as the German were more horizontal and integrated (the importance of *Zweithörer*). But with globalization there has been also a rise in "global" model of universities. The idea of "World-Class", advanced by the World Bank, is contested and accused of having a bias that favors Ango-Saxon institutions. A world-class university is then one university that performs outstandingly in research, generates cutting edge innovation and attracts world wide talent. The World Bank defines WCU as having: (a) a high concentration of talent (faculty and students), (b) abundant resources to offer a rich learning environment and to conduct advanced research, and (c) favorable governance features that encourage strategic vision, innovation, and flexibility and that enable institutions to make decisions and to manage resources without being encumbered by bureaucracy. (WB, 2009)

Figure 1. Geographical Distribution of World-Class Universities (*Top 50 in 2008*)



Sources: THES 2008; SJTU 2008.

This model has been greatly criticized insofar it does not acknowledge local traits. Are performance indicators the same in each country? Should a university be always internationally oriented or be more involved in local development? I believe there is a tension between these two orientations that is not easy to acknowledge. Every institutions wants to be both at the "endless frontier" of scientific research and fostering local development. But when resources are finite, a particular path has to be followed and is not possible to do all things well. In my opinion it is best to choose one institutional model (either internationalized, world-class research or locally relevant, with greater local embeddedness). This will make strategic planning easier for the university and might be better in the long run. In both alternatives, the international dimension is very important and has to be planned and developed, but the kind of international links and partners each orientation favors is different.

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