



FOLEC

Latin American Forum for
Research Assessment



TOWARDS A TRANSFORMATION OF SCIENTIFIC RESEARCH ASSESSMENT IN LATIN AMERICA AND THE CARIBBEAN

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Diagnosis and Proposals for a Regional Initiative¹

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The three documents which make up the Series (Evaluating Scientific Research Assessment; Diagnosis and Proposals for a Regional Initiative and Proposal for a Declaration of Principles), have been prepared by Fernanda Beigel, a specialist in the Advisory Committee at UNESCO for the review of recommendations on Open Science.

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In the book **Malestar. Los investigadores ante su evaluación** (2018), Giménez Toledo argues that the academic community feels great pressure to publish more and notices the distortions that this produces in the choice of research topics or in their writing styles. This productivism has been stimulated by the recent quantification of evaluation of individuals and institutions, as well as the use (and abuse) of the impact factor on the part of journals as an international prestige measurement unit. Big scientific publishing houses and their indexing systems decidedly contributed towards a science commercialization process which restricted scientists. The well-known phrase “publish or perish” is no longer enough to express this state of affairs; it is now about “publishing articles in high impact mainstream journals or perishing in anonymity”. University ranks, built on indicators based on those journals, have come to institutionally consolidate the power of recognition of those indexing systems. Thus, they have become a type of transnational coordination of evaluation policies that drove the universalization of that prestige industry (Kehm, 2020). In the context of the COVID-19 pandemic, the harmful effects of the scientific production commercialization were patently clear and the publishing houses were publicly pressed to free contents for massive access. Science as a common good and the need for its open circulation are now presented, specially clearly, not only before governments but for citizens at large.

The distortions produced by that dominant system affected all scientific areas but caused special difficulties for social sciences and humanities (CSH), due to both its monographic writing style and its extended use of the local languages. It is in this context that the Foro Latinoamericano sobre Evaluación Científica (FOLEC), (*Latin American Forum for Research Assessment*) is born, as an initiative of the Consejo Latinoamericano de Ciencias Sociales (CLACSO) (*Latin American Council for Social Sciences*), to promote a transformation of academic evaluation in Latin America. It is part of the Council’s long standing tradition linked to reflecting on science and higher education in the region. We should take special note of CLACSO’s General Assembly declaration at Medellín in 2015, on university and scientific research. It argued that the evaluation policies implemented in Latin America from the mid-90s, in line with the State’s neoliberal reform process, had strengthened a highly lucrative academic and publishing market worldwide. It advised against the use of indicators based on heteronomous parameters, which did not take into account the peculiarities of the Latin American and Caribbean institutions, thus invisibilizing the university as a space of interaction with society. The declaration stated that, as a result of the new trends, university extension, teaching and transference became secondary activities and all practices different to publishing were marginalized at the time of academic evaluation.

The research promoted by some of CLACSO’s work teams in the last years observed how those productivist criteria disassociated the Latin American and Caribbean research communities from their local environments. Such disassociation was boosted when the most rewarded publishing circuits were in English and following the research agendas of the central countries (Leite, D. et al. 2012; Pérez Mora et. al 2019). Especially important is the contribution made by the Working Group (GT for its Spanish acronym) Ciencia y Sociedad, coordinated by Andrés Gómez Seguel, and its predecessors, the GT Ciencia, Tecnología y Sociedad. These worked between 2005 and 2009, coordinated by Germán Sanchez Daza and Eugenia Martínez de Ita. Empowered by the joint work with the Red Iberoamericana sobre el uso del conocimiento científico (2008-2011) (*Ibero-American Network on the use of scientific knowledge*), coordinated by Hebe Vessuri, and the Red de análisis sobre la dinámica de la ciencia y la sociedad (*Network for the analysis of the Dynamics between science and society*) (2012-2015), coordinated by Pablo Kreimer, they analyzed the historical difficulties in focusing scientific knowledge on social, environmental and economic needs. There was also retrieval of the tradition of the *Pensamiento latinoamericano en ciencia, tecnología y desarrollo* (*Latin American Thought on science, technology and development*), developed by Jorge Sábato, Amílcar Herrera, Oscar Varsavsky, Máximo Halty and Marcel Roche.

As regards the role of the social and human societies in the criticism of evaluating systems, we should note the contributions made by the GT “Ciencia social politizada y móvil, en y para una agenda latinoamericana de investigaciones orientada a prioridades desde la universidad” (*Politicized and mobile social science, within and towards a Latin American research agenda focused on priorities from university*), which existed between 2013 and 2016, and currently continues as GT “Politicized Social Science”, under the leadership of Judith Naidorf. Taking into account the relevance of the tradition of university extension towards a reorientation of assessment policies in Latin America, it is of special interest the contribution of the GT “Extensión crítica: teorías y prácticas en América Latina y el Caribe” (*Critical extension: theories and practices in Latin America and the Caribbean*) coordinated by Fabio Erreguerena, Humberto Tomassino and Ivania Padilla Contreras, which is currently made up of 166 members from 14 countries. In this GT, they include the studies of the Uruguayan school and the experiences of many countries

in the region in the exchange of knowledge which takes place in the university actions oriented by social commitment. Regarding the arts and their particular marginalization in the evaluation processes, we find relevant contributions from the GT "Artes, educación y ciudadanía" (*Arts, education and citizenship*) coordinated by Damián del Valle, Ramiro Noriega and Sandra Torlucci, as well as GT 's "Apropiación de Tecnologías digitales e interseccionalidades" (*Appropriation of digital technologies and intersectionalities*) coordinated by Ana Rivoir. These have been exploring the artistic processes in relation to their different production, circulation and consumption scales, focusing on its effects on localities, bodies and genres.

As regards the institutional evaluation processes, CLACSO took a critical and propositive stance following the creation of the Sistema Latinoamericano de Evaluación Universitaria (SILEU) (*Latin American University Evaluation System*). SILEU is based on the need to rethink the role of university, in general, as a social promotion institution for critical reflection and the construction of knowledge and, that of the Latin American and Caribbean university, in particular, towards the co-construction of knowledge to promote economic development and social transformation. In this sense, evaluation actions seek to identify and promote university practices of production and circulation of knowledge, closely linked to those in charge of the preparation and monitoring of public policies: governments and social organizations. SILEU observes at the level of each course of study the valuation of autonomous practices based on reflection – self assessment of university institutions (SILEU, 2017).

On the other hand, CLACSO has played a fundamental role in the construction and maintenance of the regional circuit of scientific communication by driving initiatives to support the Latin American repositories. From the beginning of the XXI century, CLACSO developed a collaborative regional repository and, jointly with Redalyc, a collection of journals on social sciences and humanities which contributed to improving their publishing quality, their visibility and discovery. With the support of UNESCO and the participation of SciELO, Redalyc and CLACSO, it was possible to improve the online visibility of the indicators for these services and a book was published to support a renewal in the publication indicators used in evaluation processes in the region (Alperin, Packer, Aguado-López, Becerril-García, Babini, Archuby, Carrizo, García, Higa, Spano, 2014).

Along this line, the contributions of the GT on "Conocimiento Abierto como bien común" (*Open Knowledge as a common good*) should be noted, with 27 participants from 9 countries. Since 2013, this group has made it possible to develop actions towards the promotion of the non-profit open access ecosystem in Latin America, led by the scholar community and supported by the universities without charging for reading or for publication (APC-Article Processing Charges). In this GT, portals such as Latindex, CLACSO and Redalyc promote responsible scientific evaluation practices and offer the scientific journals visibility services as well as digital publication technology towards the strengthening of the editorial teams within the institutions. CLACSO also supported the Ameli-CA coalition in search of a regional development strategy of open and public access, through collaborative, sustainable, protected and non-commercial actions in Latin America and the Global South.

The specific actions on the part of CLACSO in the open access movement on a regional level and the importance that the Latin American experience gained in the global debates on the future of academic communications have been an important part of its program during the last decade. Thus, CLACSO was invited by several agencies such as UNESCO and the International Science Council, to present in different opportunities the Latin American vision on knowledge as a common good. In 2018 it was invited as a member of the Advisory Committee of the San Francisco Declaration on Research Assessment - DORA <https://sfdora.org/read/es/> to offer the Latin American perspective and contribute towards the dissemination of one of its fundamental principles: not using the journals impact factor to evaluate what is published by researchers / research teams, institutions or countries. In addition to this, CLACSO joined the signing and promotion list of organizations of the Helsinki Initiative on Multilingualism in Scholarly Communication <https://www.helsinki-initiative.org/> which promotes the diversity of languages, both in scientific communication as in the sources used towards production evaluation.

CLACSO has carried out painstaking work towards the publication of books and their availability in a digital form in open access. The digital library allows researchers in our region to use important open access platforms which, together with other networks and the effort made by Latin American universities offer very favorable conditions to give visibility to the academic production in the region, written in its local languages, as well as the drive towards a non-commercial internationalization. In the vast task of promoting research and publishing the production of the

social sciences and the humanities in the region, the concern surrounding research assessment has been present at CLACSO in many ways. Hundreds of texts from the collection of arbitrated CSH journals in open access CLACSO-REDALYC and the CLACSO repository include “evaluation” among the thematic descriptors and CLACSO has published about 100 specific documents on research evaluation.

In what follows, and based on the FOLEC document *Evaluating Scientific Research Assessment*, we seek to reflect on the core ideas behind academic evaluation and its principal dimensions, as well as the validity of the indicators and valuation schemes frequently used in the region. We shall point to the main difficulties encountered and review the existing alternative proposals. Afterwards, we will address the perspectives for a change in the evaluation system towards promoting the social relevance of scientific research. Finally, we will present a set of proposals to generate regional recommendations which aim to transform science evaluation in Latin America and the Caribbean.

Who evaluates and based on which criteria? Which are the dimensions evaluated?

Piovani (2015) observes that there are three main levels in the evaluation of scientific research. Firstly, on a conceptual level, the definition of the evaluation criteria and the observable dimensions in the assessed people and institutions. It is important to analyze here who establishes these criteria and to settle who carries out the evaluation – if they are exclusively expert peers, institutional officials, communities, the society at large, users, among others. On a second level, we observe the implementation of these criteria through indicators or reference points that make it possible to know the state of a person or an institution regarding each of the dimensions of interest. It is critical here to relate several measurements or independent records to each of the indicators, with the objective of obtaining more stable and trust-worthy results. This operationalization ends up materializing in a “grid” which considers the different dimensions and their indicators. Thirdly, we find the most concrete level of the application of the evaluation grids and, as a result of this, the allocation of scores and the preparation of an order of merit or verdict.

In the first most conceptual level, there are two key aspects in all evaluation process: who creates these criteria? in addition to who executes the evaluation? And, which are in each case the chosen evaluating criteria / dimensions? Let us analyze first the experience of considering if it is frequent for those who evaluate to also create the criteria and, if, ultimately, that would be desirable. There is much diversity on this aspect, not only according to each country but within each academic community: in some cases, there is a predominantly bureaucratic-managerial component – even if the “grid” and the analysis of each application is left to the expert committees, these have little margin of maneuver to carry out an assessment that is not merely quantitative or formal. In other cases, there is a more meritocratic peer-review tradition featured by relatively stable committees with a certain degree of margin of maneuver to create criteria, introduce indicators or ponderate them within different grids following disciplinary specificities. In some cases, these committees produce themselves a final order of merit with the assessed files and in others, they only send the individual scores or verdicts to an instance which resolves over the assessed universe.

In those countries in which there are national categorization processes for researchers and professors, the criteria can be created by a single national committee or by disciplinary committees which bear relative autonomy to solve over the evaluation criteria. The studies carried out in Argentina, for example, show that in the university categorizations, peer committees apply a grid standardized and defined by a national committee in which they have no bearing, reason for which the freedom that the assessing peers have to modify dimensions or indicators is quite restricted. In the case of the Consejo Nacional de Investigaciones Científicas y Técnicas (CONICET) (*National Council for Scientific and Technical Research*), also in Argentina, there are national committees for each area of knowledge which offer a set of basic evaluation criteria but each disciplinary committee, considering these general criteria can build their own grid with certain margins to consider the specificities of the disciplinary field (Beigel and Bekerman, 2019).

If we now focus on the dimensions assessed, in our region we observe that, given the increasing complexity of the evaluation processes for individuals and institutions, the bureaucratization process has risen and that there has been a more frequent use of quantitative indicators which appear to facilitate and “objectivize” the evaluation. With this, peer-review and qualitative valuations have increasingly lost ground (see criticism to the use and abuse of impact indicators in the Document *Evaluating Scientific Research Assessment*). Now, although peer assessment carries many advantages when evaluating a contribution or a career, it also has some disadvantages. There is a certain consensus in the available papers on the fact that this assessment on the quality of research is carried out following an intersubjective consensus whose “legitimacy” is never completely objective in that it is the result of individual valuations influenced by emotional, self-perception and excellence definitions based on these intellectual careers chosen for this task (Sutz, 2014, Lamont 2009). This is why assigning a group of specialist peers the task of creating criteria, dimensions and indicators and, at the same time, the application of the evaluation grids can result in cases of arbitrariness or systematic changes to the rules which seriously harm those who are being evaluated. The definition of the evaluation criteria and its dimensions belong to the area of scientific research evaluation policy and are linked to the orientation given to the scientific-universities policies. Nevertheless, it is vital that informed decisions are made, based on the advice of peers specialized in each scientific area, who take into account the history of the scientific field at hand as well as its epistemic cultures.

One of the main problems that arise from the observation of the scientific research evaluation experiences in different countries across Latin America is that, in practice, the criteria and dimensions are finally reduced to scientific production, with this understood, almost exclusively, in terms of publications. This means, firstly, not recognizing the importance of the activities pertaining to extension, transference, teaching and training of human resources. Thus, practices which are part of the construction of research capabilities and which imply an important investment of time on the part of the people assessed, as well as material resources on the part of institutions, are rendered unimportant. Still, there are other implications, because focusing on productivity reinforces gender asymmetries. The available literature shows there are differences in terms of productivity between men and women which result from structural factors and which must be taken into consideration in every evaluation process (Beigel and Gallardo, 2020). According to Alborno et alia (2018) globally in Ibero- America, 46% of the articles published in WoS are signed by women, a smaller participation than its demographic representation in the scientific systems in the region. On the other hand, it is possible to see that men are more connected than women with other Ibero- American colleagues through joint signature: on average, 27% more. In the case of India, for example, the participation of women in publications is considerably lower, between 20 and 37% according to the discipline (Paswan & Singh, 2019).

Some incentive systems in favor of research in Latin America have granted a real value to the production in teaching, the training of human resources as well as the researcher’s public and social responsibility actions in their categories. However, these are the exception rather than the rule. In most cases, there is an invisibilization of the diversity of institutional production styles and knowledge circulation, as well of the multiplicity of academic practices which are part of the individual scientific careers. In the context of the collaboration policies between industry and science, some countries have created instruments towards the promotion of researchers – technologists, as well as specific financing lines. Notwithstanding, these are not widespread practices in the academic culture given the fact that extension, services, advisory services and patents have not yet become relevant indicators in the evaluation systems (Rikap and Naidorf, 2020). Along this line, there has been an expressed need to move towards the observation of complete research careers and to include a varied set of research practices which value their belonging and social incidence. Linking or technological transfer is the dimension which has taken greater steps forward in the region, following a questioning of assessments based on the impact factor of the publications.

The validity of indicators and valuation schemes

Let us now consider the second level of the evaluation process, which consists of the selection of reference points which allow us to observe /qualify the dimensions under evaluation. Piovani (2015) points to a key aspect: the validity of the indicators chosen. Seen from the methodological point of view, validity is a feature of the relation

between the indicator and the more general concept at hand. Lazarsfeld said that such relationship was not unambiguous. The indicator always bears an *indicating* part which refers to the semantic content shared with the concept at hand – and which therefore justifies it as indicator–, and a *strange* part which, in any case, shares the semantic content with other(s) concept (s). That is the reason the selection will have to be based on a careful exam which takes into consideration substantive theoretical aspects. The universality and the equivalence of the indicators has also been questioned since they can have a situational specificity that -potentially- turns them into empirical reference points of diverse phenomena in different contexts. This is why contextualization is essential in the creation of evaluation criteria. This focuses the attention on the need to define not only criteria, standards and dimensions but also specific indicators according to the profiles of practices and of the people to be assessed, taking into account the historical and institutional contexts. In addition, it alerts on the mechanical movement of evaluation processes from one field to another one (Buen día *et alia*, 2017).

The validity problems which result from the acritical movement of supposedly global standards specially affect the national journals indexes in Latin America. For example, the classification of QUALIS journals in Brazil or Publindex in Colombia are based on the impact factor (ISI) or the quartiles (SCOPUS) as equivalence rates to classify their journals. However, they do not analyze the institutions that publish them, or the specific audiences they are targeted at or their accomplishments in terms of setting local research agendas. These validity problems are strengthened when, additionally, those classifications based on exogenous criteria impact on the “valuation” of the individual publications of each researcher.

We cannot ignore that indexing in a given repository implies that such journal has complied with a set of evaluation criteria which stands for a different standard from those journals which are not indexed. Latin American indexing systems have made a long-standing systematic effort and it is a good indicator to know the academic strictness of the journals. Given the mainly public nature of the Latin American circuit, its drive for open access, as well as its base at universities, ensure a peer review process removed from the industry of mainstream academic prestige. They have an advantage which favors qualitative evaluations because they do not organize hierarchically the journals into quartiles but rather grant a certification of quality. However, as we have insisted in the Document *Evaluating Scientific Research Assessment*, journal indexing cannot replace the assessment of the specific article quality or a career under evaluation.

Unlike indexed publications, the valuation of the world of non-indexed journals calls for a specific analysis based on the modality of these journals, their audience and the quality of their contributions. It will be each evaluation process, placed within its context, that will determine the value of these publications in the valuation schemes which organize the “grids” used to assessed individual careers. Thus, there will be exceptional journals which are prestigious and read by specialists but which have never accepted to request indexing. Additionally, dissemination journals, work documents or final declarations of congresses can be of great importance to certain research profiles but not to some others.

We should focus on the negative consideration of the national journals in publication indicators, given that these are generally devalued in the evaluation process because they are journals edited in the researcher’s country of origin. Thus, we identify national publication with endogamy, while national indexed journals have high percentages of foreign collaborations and an evaluation system as strict as other indexed journals in those systems. Ultimately, a national journal indexed in quality systems could be as international as it could be national. Its devaluation leads to pushing researchers away from the local agenda which is essential towards the social interaction of science.

Another negative effect of the use of decontextualized publication indexing is that it discourages book publishing. We know that book indexing is a pending task on an international and regional level but little by little, services are being developed which provide quality indicators. For example, the publishing houses included in the Directory of Open Access Books (DOAB) on an international level and SciELO Libros on a regional level, both only register peer-reviewed scientific books in open access. Accessory to this difficulty is the scarcity of national information systems which collect all the researchers’ productions without

considering the publication channels or the languages used in the transmission of scientific knowledge. Giménez Toledo (2018) has emphatically expressed the difficulty this carries towards the evaluation of these disciplines because it prevents the collection of context data on a national scale regarding the specific communication patterns. This is why commercial databases continue to be used and, in doing so, there is a devaluation of the research closest to the territory which can have a social impact on the closer community. A key transformation in the manner of assessing the publications results from the evaluation experiences of the scientific activity based on open sources which are worth exploring (quotations from Google Scholar, alternative metrics, other sources such as Twitter, Facebook, and academic networks such as Research Gate, Academia).

Now, although appropriate indicators are created which are also context-valid, it is vital to consider the different indicators which do not have the same relative weight to rebuild the complexity of a practice or an academic career. Valuation schemes are commonplace in the evaluation process but they need to be the result of a very detailed analysis and must be subjected to revisions. They vary according to the profiles assessed, so it is necessary to reflect on the orientation that works behind each "grid". The application of a grid is subjected to many factors which we should face. Piovani (2015) argues that a very usual situation results from the fact that assessors can resort to a sort of hidden curriculum or their own agenda which contradicts the assessment criteria underpinning the process. Therefore, even when there are clear criteria, diversified according to profile as well as a detailed and agreed upon evaluation grid, its application is not always lineal or simple. On the contrary, it is a process which can carry several problems and these are not limited to the quantitative component of the standardized grids but also to qualitative self-assessment- whose opponents tend to question given its "evident" subjective connotation. As we will see in the recommendations section, it is vital to contribute to the new trend to qualitative evaluations by renewing the indicators and revising the bureaucratic evaluation structures in each country / institution with the aim of stripping them off their dominant sense of control.

At the FOLEC Forum in Mexico (November 2019) Ismael Ràfols summarized many of these difficulties involving validity and belonging in the evaluation indicators and made a proposal organized around three concepts: contextualization, pluralization and participation. First, in opposition to the evaluation of universal criteria which are supposedly objective, he proposes moving towards *contextualized evaluation criteria*. In order to achieve this objective, it is necessary to adapt the indicators so that they result relevant to the assessed areas and to reduce the number of evaluation processes in order to prioritize them being more in depth, with less bureaucratic impact and with more formative information for those who are assessed. Secondly, it is convenient to promote the *pluralization of the criteria to reflect the different academic practices* which are part of the scientific research according to the type of research, the institution, the interdisciplinary nature and the diversity of links with sectors of the society. This type of assessment closer to the territory and more formative can only be developed where there is a certain level of autonomy at a local level – it does not work with centralized governments or rigid bureaucracies. Finally, contrary to a purely academic evaluation, it proposes moving towards a *social diversification of the evaluating experts*. This means, participation in the evaluation of diverse social agents who know the context of the research, such as the participation of patients in a health research.

Buen día *et alia* (2017) propose a kind of evaluation which promotes a collegiate reflection exercise, involving feedback and an informed exchange among colleagues who assume the role of interlocutors and not of judges. Certainly, such potential shall be a reality as long as the process has the active and committed participation of the people assessed and those who assess them. As for the evaluation of institutions, this contextualization is manifested in the evaluation of research units in the light of their own objectives, based on self- assessment and visits by the assessing committee to the facilities. These type of experiences have existed in Latin America and the Caribbean for several decades as well as in European countries such as the Netherlands (see VSNU KNAW NWO, Strategy Evaluation Protocol <https://www.nwo.nl/en/news-and-events/news/2020/03/making-way-for-all-aspects-of-quality.html>)

The linking of university-society and the different research profiles

It is now suitable to go back on the fact that scientific production indicators are generally focused on a single dimension of a researcher's practice: the published production. This has had negative effects in several aspects but we will specially point here to the devaluation of other practices such as transfer, linking, extension², team leadership and the training of human resources. This calls for a careful contextualization of those activities based on the institutional project or the directionality of the scientific research policies that guide these evaluation processes. Supporting the scientific autonomy and the ability to establish national agendas is essential so that in each context it is possible to find the desired balance between the global standards and the local orders.

Several studies show that the extension, linking and transference have been undervalued in the area of performance assessment in research (MINCYT, 2012; Codner and Perrota, 2018; Rikap and Naidorf, 2020). The ideal profile – not always explicit, sometimes not even conscious for the peer committees- is the researcher who publishes articles in indexed journals in the mainstream circuit, preferably in journals with a high impact factor or H index. In the last few years, the transference activities have started to receive more attention because it is becoming increasingly clear that the "impact" of the journals says nothing about the social impact of a research. The very notions of "transference" and "impact" have been discussed, as can be seen in the FOLEC document *Evaluating Scientific Research Assessment*.

Some research agencies and universities add linking activities to the evaluation processes, though with indicators not always subjected to reflection or contextualization. As a consequence, they are applied without an adequate review of the profiles or the specific valuation schemes, which result in little progress in the visibilization and promotion of these activities. The recognition or the promotion of new research profiles depends on a decision of a political-scientific nature that seeks to solve the structural problems which attempt against social relevance of science. In this sense, it is not only about opening new profiles for the admission or promotion of researchers but about creating tools towards team promotion and interdisciplinary projects. It is therefore vital to include all scientific areas because the generalized trend has been to open a gap for the creation of technologies, services and patents, thus marginalizing the social and human sciences from those policies.

Social impact indicators are generally created as an ex post measurement which are restricted to the valuation / quantification in terms of patents, products, sale of services or records of intellectual property typical of the technological transference. However, the link between university and society leads to a complex set of ex ante interactions which influence the generation of knowledge which are co-produced with the community. The extension activities are of relevance here, in their social and artistic dimension, which have contributed content to the "university social commitment". That is to say that, in addition to the policy recommendations, there are interventions and knowledge co-productions nourished through various ways of social interaction which modify the environment, contributing solutions to pressing problems in the communities. In this sense, the feminist interventions have gathered an interesting experience which subverts the typical verticality of the lineal model of transference or diffusionist extension.

In Latin America there is a long and powerful tradition of university extension, which has discussed in detail the relations between university and society, having reached a significant level of conceptual development at its national and regional congresses. This tradition had several historical rupture moments with the paternalistic and modernizing nature of the extension in its original form, which led to an aspect of the "critical extension" based

2 The concepts of transfer, linking and extension are polysemic and have had a complex path along the university systems in Latin America. To the end of this document, we understand transfer as the knowledge and / or technology which is applied through hired services, patents or the setting up of companies to satisfy industrial demands. By extension we mean the cooperative processes between University and diverse representatives, organizations and social movements which aim at a horizontal and dialogue-based relationship, not mediated by the hiring or sale of services. Linking is a concept that seeks to go beyond the limitations of the previous concepts. Some universities call "linking" to their extension areas while others use it to refer to the technological transfer area, which is why it can have different meanings.

on the need for the university to acknowledge the different types of knowledge and promote a dialogue with different knowledges and languages. Nowadays, there is an increasingly more heartfelt call to improve the interactions between university and society. However, academic globalization has contributed in the last decades to the structure of the function of research becoming autonomized and gaining a hierarchy, while it radically distanced itself from teaching and extension (Erreguerena, 2020). Precisely against that process of academic specialization, the Uruguayan school of critical extension set the “comprehensiveness of the university action”. That is to say, the coordinated development of the functions of teaching, research and extension, in the framework of the university practices with society towards the resolution of relevant social problems and in search of the common good (Tomassino y Cano, 2016). This current has taken great steps towards seeking the comprehensiveness of the educational act: “in the classroom and outside the classroom”. There are many cooperation experiences between teaching and extension on a curricular level which show the strength of these interactions (Tomassino and Rodriguez, 2010).

There are fewer experiences, however, on comprehensiveness along with the research function though this would be a fruitful way to coordinate the knowledge productions agenda with the demands of society which are manifested in the extension projects. Consequently, there are not yet many “laboratories in territory”. That is probably a good way to promote the freeing of research and the generation of research projects that are created and assessed based on the idea of comprehensiveness. Given its natural involvement in the construction of its object of research, in the very process of research and its results, social and human sciences have a robust foundation to move towards the territory. That is why Boaventura de Sousa Santos (2006) argued that the extension would have a very special meaning in the near future. Along this line, it could contribute towards going beyond the traditional lineal knowledge production model which moves in a single direction from the priorities and offers of the science, trusting an extraordinary event to generate an “invention” to “inoculate” a specific sector of the industry or other areas. The practices of open science offer an ideal stage towards the comprehensiveness of the university action.

Finally, it is worth mentioning that the academic and heteronomous evaluation has tended to, additionally, promote the invisibilization of the collaborative process in science. These are naturally produced within research teams and many times imply alliances with different institutions, as well as different countries. In this sense, it is necessary to build multidimensional evaluation models that will make it possible to observe and promote a diverse set of production profiles and circulation of knowledge. In order to limit the weight of the publishing indicators and the assessments which are merely quantitative, there is an increasing trend towards the incorporation of narratives and new curriculum formats that offer better peer review elements. The Dutch Research Council (NWO) has developed new curriculum forms which are also different in terms of the stage of the researcher’s career. It seeks to give visibility to different kinds of talent, different production profiles and the qualitative assessment of complete careers. From those proposals, we see it is convenient to combine these narratives with indicators which can be valued from a quality perspective by specialists. We should not forget that narratives are difficult to compare and the appreciation of those assessing cannot be the only way to determine merit if we are to exercise greater justice in the admission and promotion competitions. Linked to this is also the need to examine the bureaucratic structure of assessing committees, which implies reviewing their selection processes, its federalization and gender equality at all hierarchical instances.

Without a doubt, Latin American universities have been transformed by academic globalization and each country has gone down their own evaluative policy path, according to the weight of each university autonomy. The Regional Conferences on Higher Education which took place in 2008 and 2018 show the willingness of University presidents to choose a critical path in the face of the commercialization of science, to defend education as a public and social good (Rovelli, 2018). These forums are part of an increasing consensus regarding the distortions generated by the mainstream publishing system and the need to transform the ways in which we assess scientific research in the region. In line with the movement of open science, there is a call for a reconstitution of the tie between the production of knowledge and the demands of society. In this context, social sciences and humanities can carry out a relevant role to promote a turning point which alters the direction of the national research scientific policies. The CLACSO FOLEC initiative is precisely geared towards this direction and this document aims at promoting a regional discussion which will allow us to reach consensus regarding the dimensions to be assessed, the processes, indicators and tools needed to build a socially relevant science.

Which are the goals of the Latin American Forum for Scientific Assessment?

1. To promote a metamorphosis of the academic evaluation processes in Latin America and the Caribbean, with the objective of directing scientific research towards local needs.
2. To consolidate the participation of the Latin America academic community in the international conversation on an open science, understood as a universal human right and as a public common good.
3. To produce a wide-ranging and plural debate to value the complexity of the cognitive matrix of the region and the existing diversity of forms of knowledge circulation.
4. To generate regional recommendations to have a bearing on assessment policies across Latin American and Caribbean countries.

PROPOSALS AND KEY IDEAS TO MOVE FORWARD IN THE DISCUSSION OF REGIONAL RECOMMENDATIONS

1. On the necessary transformations in the academic evaluation objectives and the orientations of the assessment policies

- It is the responsibility of each country to *review its evaluation systems so they are suitable to their situation*, taking into account all the existing practices and research styles in that community during a period of time.
- It is desirable to *produce a transition from evaluations as mere control processes to evaluations as learning processes* both for those assessed (individuals and institutions) and for the local and national scientific policies.
- It would be convenient to *review the salary increase policies based on the impact factor* of the publications, directing incentives towards the production of socially relevant knowledge.
- It is of interest to *move towards participative evaluation* which includes social representatives, organizations, users or audiences involved in the research processes examined.
- Researchers profiles should be *defined within the framework of scientific policies in each country or institution, based on each national / local context and their own standards pertaining to academic quality*.
- Assessment systems *should not reward productions in English but rather favor multilingualism*, thus promoting not only official languages such as Spanish and Portuguese but also the production, communication and popularization of regional indigenous languages.
- Assessment policies should *encourage the good practices of open access and open science* in evaluating careers, scientific production and the publishing of research results.
- It is necessary to *promote the construction of a regional reference framework towards the assessment of art research* and the accreditation of these institutions on the base of the Guayaquil Declaration (2019).

2. On the evaluation processes

- The evaluation processes should be *qualitative, in spite of resorting to some quantifiable indicators with the objective of comparing careers* in competitive admissions or selection processes.
- It would be convenient to *reduce the amount of evaluation processes to prioritize more in-depth ones*, which would be less bureaucratic and which would include components of self- evaluation and formative experiences for the individuals and assessed institutions.
- It is advisable to *value and analyze all forms of communication* (publications, new scientific communication formats, technical reports, transfer, extension, public communication of science, artistic interventions) *and all circulation directions* (local, national, regional, global) according to the profile of the researcher / institution to be assessed.
- It is deemed of interest *to tend towards a multidimensional model of evaluation of academic careers* which includes the different practices involved in the scientific activity and which allows for the valuation of interphases in the investigative careers in production, dissemination and / or linking-transference of knowledge.
- Both the profiles and their dimensions, assessment criteria and valuation schemes *should be transparent and public, as well as the orders of merit resulting from the evaluations*.
- It is vital to *revalue the role of specialized peer reviews* on the quality of the projects, publications, advisories, extension activities, transfers or others.
- It is relevant to *consider the collective practices* usually carried out in research groups and interdisciplinary teams, such as the training of human resources, thesis and grant mentoring, the creation of teams, project leadership and institute management.
- It is convenient to *consider within the evaluation processes the comprehensive experiences in the teaching, extension and research activities*.
- All performance evaluations should *take into account work interruptions related to family care*.
- The *democratic set up of assessment committees* should be reviewed taking into consideration geographical – institutional and gender equity and guaranteeing periodic rotation.

3. On the assessment indicators of publications

- It would be desirable to *promote the creation of knowledge circulation indicators* which value different scales, varied registers, linguistic diversity and different audiences, according to the profile of the researcher or institution under evaluation.

Examples towards the evaluation of institutions: percentage of research projects which include local / national / regional / extra- regional studies, percentage of research projects in collaboration with other local / national / Latin America / Non Latin American institutions, percentage of publications in Spanish / English / Portuguese / other languages; current research and development contracts with non- academic sectors, according to type of counterpart, number of extension projects or programs, detailed according to geographic execution area (local, regional, national and international).

Examples of individual evaluation: participation in national indexed journals against total production, percentage of publications with open access against total production; percentage of publications indexed in Latin American repositories against total indexed publications; participation in scientific dissemination activities, percentage of local / national / regional / international collaborative publications against total production.

- It is vital to *value the production of books and chapters in collaborative books*. Examples: percentage of production in books and parts of books in co-authorship against total production; percentage of book publication in co-authorship with other Latin American countries against total book production; percentage of book publication in co-authorship with authors from other countries against total book production.

- It would be of great use to create *evaluated publication indicators* with no hierarchical classification or distinction between regional or extra- regional indexing systems. Examples: percentage of publications in indexed journals against total production; percentage of publication of national books against total book publication; publication of articles in non-Latin American journals against total of articles.

- It is necessary to *revalue publications in national indexed journals*. Example: percentage of publications in national indexed journals against total published production.

- It is important to *encourage multilingualism and to promote publishing in local languages*. Examples: percentage of publications in English against total published production; percentage of publications in Spanish / Portuguese / French / German / others against total production; has at least 1 publication in indigenous languages.

- *Publishing in open access and the availability of open data should become an indicator of quality and scientific universality*. Examples: percentage of publications in open access against the total production; percentage of publications in open access against the total indexed publications; availability of open research data.

4. On the indicators of science social relevance

- The science indicators of relevance and social interaction should not be reduced to results ex post measurements but should be *part of the presentation of research proposals as well as of the evaluation of research projects*.

- It is necessary to incorporate *knowledge co-production* indicators with the community / citizens. Examples: Exchange experiences carried out with the community during the formulation of the project and / or of the research; learning instances resulting from the interaction between researchers-citizens.

- In order to value the policy recommendations resulting from the production of social and human sciences, it is necessary to incorporate *indicators of fundamental research focused towards use*. Examples: productions with recommendations on public policy presented before public institutions; development of social, phenomena, technical reports and scientific advisory which had an impact on public policies.

- In traditional scientific publications (articles and books) it is convenient to include a *narrative section that describes the social relevance* of that scientific production both from the author's perspective as from that of the social representatives involved.

- To promote social incidence, it is necessary to incorporate *social intervention indicators*. Examples: feminist interventions, interventions in communities, research-participative action projects; mediations in social, legal or cultural conflicts.

- Research into arts and artistic extension have a high social impact which can be measured by means of *indicators of creation with social purposes*. Examples: original productions in different languages according to the audience; public communication designs, design of public spaces; design of objects of social value.

5. On regional platforms, national information systems and institutional repositories

- It would be fundamental to move towards the construction of *nationally integrated curricular* databases which gather all the information pertaining to the complete career of people in teaching, research and those who are in training, including the complete scientific production, technological transference, social extension and artistic production of individuals. It should link the production to the curricular data and incorporate the records with complete texts in the institutional repositories.
- It is desirable to move towards an *interoperable platform in the region*, which implies implementing unique identifier policies for each journal article (e.g.: DOI) and unique identifier for each researcher (e.g.: ORCID).
- It is deemed a priority to build a regional database which gathers on an article level the whole *assessed and published scientific production* in the journals of the SCIELO-REDALYC-LATINDEX-DOAJ-LA REFERENCIA repositories.
- Every publication should include a section which describes the *content evaluation process of the published production*.
- It would be advisable to *review the national journal indexes* which apply to the global classifications with an impact factor to produce lists of quality journals and according to a diversity of audiences.
- It would be advisable to move towards *new curriculum models* which report on the qualitative evaluations through the incorporation of narratives both on the part of the assessed people and of those who carry out the evaluation, including self-evaluation modalities, selection of the most relevant productions and justification of the report based on the contextualized indicators.

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