

How to reform research evaluation in Spain. Institutional accreditation as a response to the European *Agreement on research assessment*. Letter

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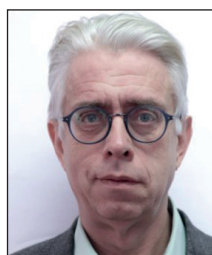
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Abstract

The reform of evaluation proposed at the European level in the recent *Agreement on Reforming Research Assessment* represents a window of opportunity to reform the Spanish evaluation system at a moment when the new *Organic Law of the University System (LOSU)* is being debated. This agreement establishes the primacy of peer review based on qualitative criteria to be able to recognize the diversity of contributions and research careers, and advocates preventing inappropriate use of journal-based metrics. How can evaluation in Spain, heavily based on these metrics, be reformed to align with these principles? In this letter we propose that it is not possible to move towards the principles of the European agreement without making structural changes in the governance of evaluation, with a return of autonomy to the universities. We advocate that individual evaluations by agencies outside the university should be limited, and that institutional evaluation should be encouraged instead. We collect a proposal for 'institutional accreditation' as a public control mechanism for the hiring and promotion of professors at the university.

Keywords

Research evaluation; Qualitative evaluation; Institutional accreditation; Evaluation; Research; *Organic Law of the University System (LOSU)*; Accreditation agencies; Indicators; Metrics; Promotion; Researchers; Spain.

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1. Introduction

In July 2022, the *Agreement on Reforming Research Assessment*¹ was published following a broad consultation and debate process sponsored by the *European Commission*. A total of 350 organizations (evaluation and funding agencies, universities, research institutes, foundations and learned societies), including the main Spanish institutions (34 in total), participated in the meetings that drafted the *Agreement* and showed their interest in contributing to the process of change. The *Agreement* establishes the primacy of qualitative and peer review assessment, which clashes with the dominant practices in Spain, especially regarding the evaluation of merits and individual accreditation practices (Delgado-López-Cózar; Ràfols; Abadal, 2021).

There is a broad consensus on the need to reform research assessment in Spain in the direction proposed by the *Agreement*, but the instruments and processes through which such a reform could be implemented are not clear. The draft of the *Organic Law of the University System (LOSU)*, which is currently being debated in *Congress*, on the one hand maintains a system of accreditation and evaluation of individual merits by centralised external agencies, and on the other hand introduces tools that would allow each department or university to be evaluated according to their unique missions (Ahedo-Gurrutxaga; Martínez-Palacios; Ormazabal-Gaston, 2022).

In what direction should evaluation be developed in Spain to align it with the reform processes promoted internationally? This was one of the main debates in a course-symposium on research evaluation organized by the *Ministry of Universities* last July at the *Menéndez Pelayo International University (UIMP)*.² The event was inaugurated by the Minister of Universities, Joan Subirats,³ and attended by representatives of the *European Commission*, *Science Europe*, the *European Association of Universities (EUA)*, and the main Spanish institutions involved in the *Agreement*, such as the *Spanish Research Agency (AEI)*, the *National Agency for Quality Assessment and Accreditation (Aneca)*, the *Conference of Rectors of Spanish Universities (CRUE)*, the *Spanish National Research Council (CSIC)*, *La Caixa Foundation*, and various evaluation experts.

We participated as speakers in the meeting and in this editorial letter we want to share, first, the arguments that were presented regarding the need for a change in research governance and evaluation practices to provide greater autonomy to the universities, and second, to highlight what we consider the most promising idea of the meeting: institutional accreditation. According to this proposal, institutional accreditation should replace the individual accreditation of researchers (currently necessary for recruitment) with an accreditation system for departments or universities. This mechanism would allow universities to recover fully the capacity and responsibility to hire their academic staff, employing criteria appropriate to their own objectives and missions, while governments would retain at the same time a guarantee of external control over universities through accreditation agencies.

2. Winds of change blowing from Europe: the primacy of qualitative assessment

The movement towards reforming research assessment has progressed in 2022 in an unexpectedly successful way. The *European Commission* and other organisations that have promoted the concepts of Open Science and Responsible Research and Innovation (RRI) in the last decade have concluded that evaluation systems based implicitly or explicitly on publication metrics (bibliometrics) are a major obstacle to achieving changes in the practices towards Open Science and RRI. Furthermore, the key role of bibliometric indicators in the assessment processes is seen as perverting scientific practices, as has been widely documented in Spain and in many other countries (Weingart, 2005; Cañibano; Vilardell; Corona; Benito-Amat, 2018; Delgado-López-Cózar; Ràfols; Abadal, 2021; Delgado-López-Cózar; Martín-Martín, 2022).

As a result, in 2020 the *European Commission* decided to promote a reform process. In December 2021 the *EC* published the document 'Towards a reform of the research evaluation system' in which it invited European and international scientific institutions to build a coalition of the willing to jointly move towards a new research evaluation system (*European Commission*, 2021). In June 2022, the *European Council* publicly supported the need for reform research assessment, especially in relation to open science.⁴ In July 2022, the *European Commission* published the text of the *Agreement on Reforming Research Assessment*. In September the *EC* announced the creation of the *Coalition for Advancing Research Assessment (Coara)*, <https://coara.eu>, which will be set up in early December 2022. In becoming signatories of the *Agreement*, organizations make a commitment to develop a reform process in their evaluation practices. At the time of writing this letter (November 2022), more than 360 organizations, including 40 from Spain and prestigious organisations like *CERN*, *CNRS* and *DFG*, have already joined the *Coalition*. In addition, in countries like Switzerland, Norway or the Netherlands, a quick consensus has been achieved: the main funding agencies and university associations have signed the *Agreement*.⁵

The *Agreement* is an ambitious document that draws on proposals made in the last ten years such as the *San Francisco Declaration on Research Evaluation (DORA)*,⁶ the *Leiden Manifesto* or the *Hong Kong Principles* (Hicks et al., 2015; Moher et al., 2020). This *Agreement*, however, does not aim to be just another statement, but rather to become a true engine of change. In summary, we are witnessing the launch of a reform movement sponsored and participated by the main European science policy institutions,

“ How can evaluation in Spain, heavily based on journal metrics, be reformed to align with principles and processes promoted internationally? ”

which is expected to generate far-reaching transformations.

The document proposes general principles that revolve around a central objective: that the evaluation processes assess research in accordance with the plurality of knowledge and contexts of science in the 21st century. That is, that evaluation practices should cater to the multiplicity of contributions, both academic and societal, from scientific institutions and researchers, and support the open and responsible science practices that the *European Commission* has been promoting.

It is impossible to adopt the more contextualized and diverse evaluation criteria proposed by the Agreement in bureaucratic assessment structures that are distant from the person being evaluated

The central principles of the *Agreement* are the need to 'recognise the diversity of contributions to, and careers in, research in accordance with the needs and nature of the research', so that the evaluation is based 'on qualitative evaluation for which peer review is central, supported by responsible use of quantitative indicators'. To achieve this, one should 'abandon inappropriate uses (...) of journal- and publication-based metrics' and 'avoid the use of rankings of research organisations in research assessment'.

The *Agreement* does not prescribe specific evaluation practices. Instead, it establishes that research institutions must implement these general principles according to their contexts and missions, respecting the 'autonomy of research organizations' and 'freedom of scientific research'.

Yet, these reforms encounter important obstacles. Part of the resistance to change is cultural: a generation of researchers (that has grown up within a quantitative evaluation system and 'naturalized' its practices) will need to adapt to different modes of evaluation. Other barriers are institutional, as formal criteria based on easily available quantitative indicators (like journal rankings and impact factors) have become formally established in governance structures. In a few European countries, including Spain and Italy, another additional barrier is encountered as accreditation and promotion decisions are made by centralized agencies using bureaucratic processes based on metrics. How can the institutional barriers posed by the crawl of bureaucratic processes that are rigidly based on quantitative criteria be overcome?

3. Governance must be transformed in order to change the evaluation criteria

Is there the possibility of changing the evaluation criteria while maintaining the Spanish current system of accreditation and evaluation by external agencies? Can a form of individual peer review that is capable of considering a diversity of scientific contributions and application contexts be carried out from bureaucratic and remote agencies?

We believe that it is impossible to adopt the more contextualized and diverse evaluation criteria proposed by the *Agreement* in bureaucratic assessment structures that are distant from the person being evaluated. Centralized structures require the use of standardized criteria that can be applied quickly and homogeneously to the evaluated population. Such a need gives rise to rigidities that are incompatible with the appreciation of diversity sought by the *Agreement*. The pluralization and flexibility of evaluation criteria cannot be implemented from an administrative machinery that has to evaluate hundreds of curricula in each call, and therefore cannot avoid simplifying its decisions through the use of metrics. The cost and time required by external agencies to adopt contextualized and plural evaluations would be exorbitant. In practice, it is impossible to apply diverse and flexible criteria while keeping the standardized processes that bureaucracies need.⁷ For example, *Aneca* experienced an administrative collapse when a new assessment scheme to reward knowledge transfer (the so-called 'Sexenio de transferencia') was implemented and more than 25,000 applications were received.⁸

In addition, these accreditation systems have not achieved their objectives despite their high administrative costs. Accreditation by external agencies was introduced in the 2000s to avoid hiring academics with very low research performance, in a climate of widespread suspicions of nepotism in recruitment. But have accreditations or evaluations by external agencies managed to improve lecturer selection processes and reduce favouritism? Does it make sense that candidates spend months of work to prepare the extensive documentation necessary for the accreditations?

The low mobility and internationalization levels of Spanish universities suggest that not only has individual accreditation failed to diversify the workforce but has also created additional barriers for international candidates. According to data from the 2019-20 academic year, 73% of researchers and lecturers in public universities work at the same university where they read their thesis, and only 2.5% of them are foreign nationals (*Ministerio de Universidades*, 2022). There are also doubts regarding the benefits of the Sexenio programmes (**Osuna; Cruz-Castro; Sanz-Menéndez**, 2011), compared to their negative effects (**Delgado-López-Cózar; Ràfols; Abadal**, 2021; **Delgado-López-Cózar; Martín-Martín**, 2022). The current system tends to ensure a minimum research capacity, but it does not prevent mediocrity since the bureaucratic assessment system discourages the search for creative, original or risky contributions (**Rodríguez-Navarro**, 2021).

In short, the individual system of accreditation and merit evaluation by agencies outside the university has not served its objectives of avoiding 'inbreeding', promoting mobility and improving research quality (**Rodríguez-Navarro**, 2021; **Cruz-Castro; Rodríguez-Navarro; Sanz-Menéndez**, 2022). It is also incompatible with the evaluation principles promoted by the *Agreement*. Therefore, we think that this evaluation system needs to change.

The draft of the new law of universities (*LOSU*) maintains the requirement of individual accreditation and evaluation by external quality agencies. We believe that, at a time of global transformation of research assessment, it is a pity that the *LOSU* does not adopt measures that help Spanish institutions follow the best international practices.

For Spanish universities to be able to adopt the new evaluation principles, a change in governance is essential. In order to carry out a more plural and flexible evaluation with qualitative criteria, it is necessary to evaluate fewer times, but better, at a collective level and from decision-making places closer to practice, from which there is the capacity to understand the value of the contributions made by those being evaluated. To achieve this, all decisions on recruitment and promotion must be returned to universities, as is the case in most European countries. How to achieve this return to autonomy without the risk of generating favouritism and more “inbreeding”?

“The individual system of accreditation and merit evaluation by agencies outside the university has not served its objectives of avoiding ‘inbreeding’, promoting mobility and improving research quality”

4. Institutional accreditation: university autonomy with guarantee of control

In the summer course mentioned above, the most promising proposal was made by Sebastián Chávez de Diego⁹, director of the *Directorate of Evaluation and Accreditation (DEVA)* of the *Andalusian Knowledge Agency (DEVA, 2022)*: the institutional accreditation of centres. The proposal is that on the one hand, full autonomy in hiring and promoting their lecturers should be returned to universities without the need for prior accreditation. On the other hand, periodically (between 4 or 6 years), the external evaluation agency would accredit that the institution complies with agreed quality criteria in their selection and promotion procedures. In general, it would be preferable to carry out accreditation at the level of university departments, but it could also be carried out at the school or university level where necessary.

This system of governance would be more flexible, thus allowing in hiring and promotion processes the application of criteria according to the specific needs of each university and department. At the same time, the accreditation agency would be able to exercise oversight over recruitment and promotion procedures, processes, and practices, and only units with proven capacity and results could exercise autonomy.

The proposal does not entail a major legislative or process change because institutional accreditation is a mechanism that already exists in Spain and is applied by various agencies to evaluate the teaching of official titles.¹⁰ It would be a matter of adding to the current accreditation procedures components for the selection and promotion of lecturers. In addition, this change could be introduced gradually and adapted to the diverse capabilities of Spanish universities. In fact, the *LOSU* draft explicitly mentions the concept of institutional accreditation and its regulation.¹¹ However, the effects of institutional accreditation on the practices of recruitment and evaluation processes are likely to be profound, and its application could have highly transformative consequences.

Regarding criteria, the accreditation of assessed units could be developed by combining procedural standards and analysis of the outcomes of their selection or promotion decisions. The first would include the internal procedures and regulations for hiring and promoting academic staff, such as the selection criteria and the composition of hiring and promotion panels (*DEVA, 2022*). The analysis of outcomes would include dimensions such as the staff diversity in terms of gender, nationality, academic background and careers of its staff teaching and social contributions of the unit, its collaboration with socioeconomic actors, and its open science, responsible research and integrity practices.

There are two advantages to this evaluative framework that focuses on the contextualized contributions of the department and not the individual. First, it would facilitate evaluation according to the multiple missions of the university, so that social impact, open science, or teaching could be made visible alongside the current dominant criterion, the prestige of individual publications (even worse: journal impact factor!). This point is crucial because missions such as quality teaching, creative management or social contribution are important in the 21st century university, but they do not lend themselves to an individual evaluation based on standard metrics applied “at distance”, since they must respond to the unique commitments and specialization of each department. In addition, a customized evaluation would make it possible to assess some aspects in a formative way, that is, suggesting measures for improvement.

Second, institutional accreditation would make it possible to hire and promote profiles with different qualities of merit so that the departmental teams could have personnel with diverse and complementary capacities. This would allow for a variety of skills and specialisations allowing the department to function more as a team combining different skills sets and capacities (in teaching, research, engagement, etc.). Moreover, this would make it possible for universities to introduce new profiles as needed to address new tasks and challenges.

“Institutional accreditation would make it possible to hire and promote profiles with different qualities of merit so that the departmental teams could have personnel with diverse and complementary capacities”

Further, the elimination of individual accreditation would remove the ‘negative’ filters that pose access barriers to researchers of foreign nationality or with unconventional profiles, thus helping reduce “inbreeding”. Additionally, it would facilitate hiring academics with the specific skills that the department would consider to be lacking. Institutional accreditation would make it possible to evaluate various aspects of diversity, such as academic background of the professors, but also gender and nationality, and make them visible and, eventually, influence them.

“ Institutional accreditation would make it possible to evaluate various aspects of diversity, such as academic background of the professors, but also gender and nationality ”

Finally, we wish to highlight the possible synergy between institutional accreditation and a novelty of the *LOSU*: the partial funding by objectives. The draft law introduces multi-year programmes that would be agreed between universities and the regional governments, which are their funders. These programming opens opportunities to define the missions of each university and allocate part of its funding based on the performance in relation to these missions. The universities and departments would propose a prioritization of missions in the multi-year programming, reflected in teaching, research, and social outreach objectives.

In this context, it would be possible and reasonable to align the assessment developed for institutional accreditation with the objectives of the university programmes. This alignment would favour a balance between universities’ autonomy and accountability. The units able to manage individual incentives in accordance with their objectives and criteria should be accredited.

5. Conclusion: A new assessment for 21st century science

In the International University Menendez Pelayo conference there was consensus that we must rethink evaluation in the face of changes in research missions, and the move towards open science (which includes the participation of social actors) and addressing global challenges (Saenen *et al.*, 2019; Molas-Gallart *et al.*, 2021; Janssen; Bergek; Wesseling, 2022). In a world where the diffusion of technologies affects all areas of life, and where the use of academic knowledge reaches increasingly diverse social spaces, evaluation processes must reflect these changes instead of erecting themselves as a barrier to them. Research assessment has to evolve according to the growing importance of knowledge and the university in society.

The European *Agreement* and the debate on the new law for universities (*LOSU*) offer an opportunity to develop a new governance framework for accreditation and evaluation in which universities can autonomously assess contributions of their lecturers and researchers, in accordance with the specific missions of each assessment unit.

The *LOSU* draft recognizes the importance of the new missions of the universities and opens options for a more plural evaluation of their contributions. However, and in contradiction with these ambitions of epistemic plurality and service to society, the draft maintains the existing accreditation and evaluation system, with its focus on the standardised assessment of individuals executed by external agencies. We believe that it is a mistake to maintain a system that is antithetical to current policy objectives of university and scientific policy, and which has been unable to deliver on its initial goals of improving mobility.

However, the draft of the new *LOSU* law maintains sufficient diversity of options so that its application can lead to substantial improvements. Even if the *LOSU* maintains accreditation and individual merit evaluation, there would be an opportunity for the new legislative elements that point towards institutional accreditation and greater university autonomy to be later regulated and applied in a way that aligns with the principles of the *Agreement*.

In order to achieve this alignment, it is essential that the development of the *LOSU* prevents accreditation agencies from applying the logic of diversification and flexibility that inform the *Agreement* while preserving the centralised applications of standardised criteria in a bureaucratic logic. The opposition of logics (standardization against flexibility) could lead to an administrative collapse due to the proliferation of indicators and evaluators. The solution would be, on the contrary, to reduce the importance of individual accreditation simplifying its procedures and opening its requirements, while developing in parallel institutional accreditation as the main control filter, so that it is the universities who develop and apply criteria in the pursuit of diversity as proposed by the *Agreement on the Reform of Research Assessment*.

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There is currently a window of opportunity to redirect the research assessment in Spain towards more positive horizons, in which the evaluation has less to do with bureaucracy and control, and more with supporting the role of the university and research in the construction of a better future.

6. Notes

1. <https://coara.eu/agreement/the-agreement-full-text>
2. UIMP course 'Research evaluation: challenges and opportunities for the Spanish university system' http://www.uimp.es/agenda-link.html?id_actividad=6551&anyaca=2022-23
3. His presentation can be seen at: <https://surfdrive.surf.nl/files/index.php/s/RTm7ONEuIDmZd2t>
4. <https://www.consilium.europa.eu/media/56958/st10126-en22.pdf>
5. The list of signatories is public: <https://coara.eu/agreement/signatories>
6. <https://sfdora.org>
7. For example, **Scott** (1998) gave a detailed description of how bureaucratic control and efficiency measures applied by modern states in urban planning and agriculture had very negative effects due to the suppression of diversity. This criticism of the consequences of bureaucratic standardization can also be extrapolated to research (**Ràfols**, 2019).
8. <https://www.csif.es/contenido/nacional/educacion/268060>
9. His presentation is available at: <https://surfdrive.surf.nl/files/index.php/s/3LIGGpHORWausy3>
10. Agencies such as DEVA, ANECA and AQU have already developed their institutional accreditation processes: <https://deva.aac.es/?id=acreditacioninstitucional>
<https://www.aneca.es/acreditacion-institucional>
<https://www.aqu.cat/en/Universities/Evaluation-of-institutions-and-centres/Institutional-accreditation>
11. Article 5 of the LOSU draft states that "the Government will regulate the procedure and conditions for the institutional accreditation of university centers, based on the recognition of the university's capacity to guarantee their academic quality."

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