

## Working Group on Reforming Academic Career Assessment

### Case study “Reforming research and academic careers assessment in Spain”

Author: Pilar Paneque, National Agency for Quality Assessment and Accreditation (ANECA), Spain

<b>Country</b>	<b>Country/Region/International</b> Spain
<b>Name</b>	<b>Official name of the initiative</b> Reforming research and academic careers assessment in Spain
<b>Institution</b>	<b>Name of the institution(s) responsible for the initiative</b> ANECA (National Agency for Quality Assessment and Accreditation)
<b>Stakeholders</b>	<b>Names of other organisations/communities involved</b> <p><b>Consulting agents</b></p> <ul style="list-style-type: none"> <li>• ANECA working group with experts in bibliometrics, scientometrics, science policy, social impact of research and open science.</li> <li>• National Commission for the Evaluation of Research Activity (CNEAI).</li> <li>• Committees in charge of research evaluation (15).</li> <li>• Commissions in charge of academic career evaluation (30).</li> </ul> <p><b>Collaborating agents</b></p> <ul style="list-style-type: none"> <li>• Spanish Academic Libraries Network (REBIUN): deposit of research results in open repositories policy.</li> <li>• Spanish Foundation for Science and Technology (FECYT): design of a new standard short and narrative academic CV.</li> </ul> <p><b>Organisations consulted</b></p> <ul style="list-style-type: none"> <li>• Faculty, Teaching and Research Commissions of the Conference of Rectors of Spanish Universities (CRUE).</li> </ul>

	<ul style="list-style-type: none"> <li>• Organizations specialized in gender issues (Women &amp; Science Unit, University Platform for Feminist and Gender Studies EUFEM, and Association of Women Researchers and Technologist AMIT).</li> <li>• Government agency for disability (Real Patronato sobre Discapacidad)</li> <li>• Young researchers' organisations (FPU Investiga, FPI en Lucha, Federación de Jóvenes Investigadoras Precarias, Coordinadora Marea Roja de la Investigación, Plataforma PDI Precariat, Red de Doctorand@s del CSIC).</li> <li>• Network of Associations of Spanish Researchers and Scientists Abroad (RAICEX)</li> <li>• Conference of Social Councils</li> <li>• Trade union organizations (CSIF, CCOO and UGT)</li> </ul> <p><b>Public participation of the entire university and scientific community</b></p> <p>More than 600 people in the participation process for the research assessment reform and more than 2,800 in the participation process for the academic career assessment reform.</p> <ul style="list-style-type: none"> <li>• University (91 universities) and research staff from research centers and hospital centers</li> <li>• University and scientific research support services</li> <li>• University and scientific library publishing services</li> <li>• Ethics Committees</li> <li>• Scientific societies and associations</li> <li>• Deans' Conferences</li> <li>• University and scientific publishers</li> <li>• Private publishers</li> </ul>
<b>Year</b>	<p><b>When the initiative was launched</b></p> <p>2023</p>
<b>Documentation</b>	<p><b>Link to the main document describing the initiative</b></p> <ol style="list-style-type: none"> <li>1. On the reform of research assessment: <ul style="list-style-type: none"> <li>• In <a href="#">Spanish</a>, published in the Official State Gazette</li> <li>• <a href="#">News with a summary of the process followed and the changes made</a></li> </ul> </li> <li>2. On the reform of academic career assessment: <ul style="list-style-type: none"> <li>• New accreditation criteria: <ul style="list-style-type: none"> <li>o In <a href="#">Spanish</a></li> </ul> </li> </ul> </li> </ol>

	<ul style="list-style-type: none"> <li>o In <a href="#">English</a></li> <li>• <a href="#">News with a summary of the process followed and the changes made</a></li> </ul> <p>3. On ensuring effective equality, conciliation and inclusion:</p> <ul style="list-style-type: none"> <li>• <a href="#">Resolution of the Director</a> (in Spanish)</li> <li>• <a href="#">News with a summary of the changes made</a></li> </ul>
<b>Website</b>	<p><b>Link to the website of the initiative (if available)</b></p> <p>CoARA space:</p> <ul style="list-style-type: none"> <li>• In <a href="#">Spanish</a></li> <li>• In <a href="#">English</a></li> </ul>
<b>Summary</b>	<p><b>Brief description of the initiative</b></p> <ul style="list-style-type: none"> <li>• Reforming research and academic careers assessment in Spain:</li> </ul> <p>ANECA renewed its management team on February 28, 2023 and, since then, has been promoting a reform of research assesment within the framework of the commitments acquired with the Agency's accession to DORA, ARRA and CoARA in March of the same year.</p> <p>In addition, a new law on the Spanish University System will come into force in April 2023, which promotes a series of principles related to faculty evaluation and to open and citizen science, which facilitate and support all the actions undertaken by ANECA since then.</p> <p>On the one hand, the criteria for assessing research in a national call (that has been in existence for more than 30 years) in which 6-year periods of research activity are assessed on the basis of 5 contributions selected by the candidate.</p> <p>On the other hand, and as a result of the approval of a new Royal Decree, in July 2023, which regulates the accreditation of faculty members to access the two positions of Lecturer and Professor (as civil servants) in Spanish universities, the criteria for assessing the academic career will be revised.</p> <p>The following principles will be followed in both assessment processes:</p>

	<ul style="list-style-type: none"> <li>• Recognize a greater diversity of academic profiles and careers, and value other types of research outputs in addition to scientific publications.</li> <li>• Value the social impact of the research in addition to the scientific impact.</li> <li>• Focus assessment on the value of contributions rather than the means of dissemination (mainly scientific journals).</li> <li>• Strongly support Open Science and Citizen Science.</li> <li>• Value collaboration and interdisciplinarity.</li> <li>• Value positively the use of languages other than English.</li> <li>• Move towards a more qualitative assessment (narrative CV) supported by a responsible use of quantitative indicators.</li> <li>• Rebalance the assessment of the university's core missions: teaching and research.</li> <li>• Introduce a new dimension of leadership to seek accreditation as a Professor, valuing the transformative capacity of academic and scientific institutions.</li> <li>• Promote integrity and ethic in academic and research activity, as well as in the assessment process.</li> <li>• Avoid gender bias in the assessment and implement measures to ensure equality, conciliation and inclusion.</li> </ul>
<b>Target audience</b>	<p><b>Description of the main target audience of the initiative</b></p> <p>University faculty in Spain's (91 public and private universities) and research staff in research centers, including hospitals.</p> <p>In total, between research assessment and academic career assessment, the reform affects approximately 25,000 people evaluated by ANECA each year.</p> <p>In addition, other regional agencies, universities and research centers have decided to adopt the assessment model proposed by ANECA, so the annual indirect impact will be much higher.</p> <p>It can be said that the target audience is the academic and scientific ecosystem as a whole.</p>
<b>Geographical Scope</b>	<p><b>Description of the primary geographical scope of application</b></p> <p>Spain</p>
<b>International</b>	<p><b>Description of the international potential for adaptation</b></p>

<b>potential:</b>	<p>The reform promoted by ANECA has a national impact but with clear international links. On the one hand, the Agency is inspired by and shares the international research reform movement, following the Leiden Manifesto, DORA, ARRA or CoARA principles, as well as other references and precedents such as the document <i>Room for everyone's talent</i> (The Netherlands, 2019).</p> <p>On the other hand, ANECA is a member of the European Association for Quality Assurance in Higher Education (ENQA) and of the Ibero-American System for Quality Assurance in Higher Education (SIACES), which it shares its reform of research and academic careers assessment. In addition, ANECA is currently coordinating an <a href="#">ENQA-SIACES project</a> to align the quality guidelines for higher education in Europe and Ibero-America. There is also a strong connection with the Ibero-American Knowledge Space for the use of Spanish in science.</p> <p>Finally, together with the Conference of Rectors of Spanish Universities (CRUE) and the Spanish National Research Council (CSIC), ANECA coordinates a <a href="#">National Chapter of CoARA</a>, which allows us to share our practices with other National Chapters and Working Groups of CoARA.</p>
<b>Goal</b>	<p><b>Description of the intended change</b></p> <p>The goal is to create a new culture of evaluation based on the quality, relevance and impact of a reduced number of contributions, which will reduce the burden on the system and the community, particularly in terms of the number of publications required for academic promotion, and will be more respectful of a wider variety of careers.</p>
<b>Relevance</b>	<p><b>Description of the key elements that are relevant for reforming career assessment</b></p> <ul style="list-style-type: none"> <li>• <i>Diversity</i>: The reform has been guided by the search for a system that recognizes a greater diversity of academic and scientific profiles and careers. Up to now, evaluation system have been overly prescriptive and based on an accumulation of merits assessed by quantitative indicators. Recognising diversity, in an increasingly complex and diverse scientific context requires the use of a greater variety of evaluation methods (qualitative and quantitative) and supporting indicators that go beyond the traditional IF.</li> </ul>

	<ul style="list-style-type: none"> <li>• <i>Openness</i>: Open science will also be pursued, not only in terms of open access to research, but also to society as a whole. To this end, the new evaluation system will include the assessment of knowledge generation carried out in collaboration and with the active involvement of citizens in all or part of the research process (citizen science, participatory science, community science, etc.) and/or in dialogue with other systems and social actors (public administrations, local communities, groups, entities, third sector organizations, etc.).</li> <li>• <i>Context</i>: We are moving towards a narrative CV model to give the candidate the opportunity to explain the context in which his or her academic career takes place. This will be essential information for the peer evaluation of candidates, since personal realities or the territorial (centre/periphery) or institutional context itself, which have a decisive influence on a CV, cannot be overlooked.</li> <li>• <i>Equality and inclusion</i>: Active measures will be taken to ensure effective progress in terms of equality and conciliation. In particular, specialists in the integration of the gender perspective in the evaluation are included in all commissions, some requirements are waived for situations of maternity/paternity, long-term illness, caring for family members or disability, and special situations such as single-parent families are taken into account. We are also working on the design of a specific training (micro-credential) on gender bias in evaluation to be offered to all evaluators in 2024.</li> <li>• <i>Ethics and integrity</i>: ANECA's Code of Ethics has been updated to strengthen the monitoring of conflicts of interest, and the responsibilities of evaluators and the persons being evaluated. For the first time, a system based on the principle of honesty and trust is designed, without the need for supporting documentation (a real cultural revolution in Spain, a country with a strong bureaucratic tradition). It is also the first time that a declaration of the use of generative Artificial Intelligence has been requested, as long as it affects the original content of the publication.</li> </ul>
<b>Qualitative</b>	<p><b>Description of recommendations regarding qualitative assessment</b></p> <p>The reform of the academic career assessment states that the procedure:</p> <ul style="list-style-type: none"> <li>• It will ensure both qualitative and quantitative assessment of teaching and research merits and knowledge transfer, with a wide range of indicators of scientific relevance and social impact.</li> </ul>



	<ul style="list-style-type: none"> <li>• It will ensure an assessment based on the specificity of the area or field of knowledge, taking into account, among other criteria, professional experience, especially in the case of regulated health professions, local relevance, linguistic pluralism and open access to scientific data and publications.</li> <li>• The merits and competencies of the applicants will be assessed in accordance with international standards for the assessment of teaching and research quality, in particular in accordance with the principles of the San Francisco Declaration on Research Assessment (DORA) and the Coalition for the Advancement of Research Assessment (CoARA).</li> </ul> <p>The reform of research assessment states that:</p> <ul style="list-style-type: none"> <li>• An adjustment will be made to the combination of qualitative methods and quantitative indicators used for to assess the contributions submitted. This will take the form of a request, in accordance with the rules applicable to each scientific discipline, for a narrative justifying the evidence of the relevance and impact of each contribution, supported by a responsible use of quantitative indicators.</li> <li>• Narrative bibliometrics plays a key role in the drafting, presentation, justification and rigorous contextualization of evidence and indications related to the visibility, dissemination and influence of the results of scientific research produced during the period under assessment. In line with the basic principles of CoARA, it is recommended to avoid mere counting, so that the information provided should be contextualized, multidimensional and subject to objective verification.</li> </ul>
<b>Quantitative</b>	<p><b>Description of recommendations regarding quantitative assessment</b></p> <ul style="list-style-type: none"> <li>• An adjustment will be made to the combination of qualitative methods and quantitative indicators used to assess the contributions submitted (...). This will take the form of a request, in accordance with the rules applicable to each scientific discipline, for a narrative justifying the indications of relevance and impact of each contribution, supported by a responsible use of quantitative indicators.</li> <li>• The use of composed bibliometric indicators that do not follow international standards for responsible metrics is discouraged.</li> </ul>

	<ul style="list-style-type: none"> <li>Accepted metrics are classified according to their level of application (dimension):           <ul style="list-style-type: none"> <li>A. Input level dimensions:               <ul style="list-style-type: none"> <li>Citation metrics</li> <li>Usage and readership metrics</li> <li>Social influence or adoption metrics</li> <li>Social visibility metrics</li> </ul> </li> <li>B. Journal/editorial dimensions:               <ul style="list-style-type: none"> <li>Metrics on the scientific impact of the journal/editorial</li> <li>Metrics on the quality in journal/editorial management</li> </ul> </li> <li>C. Dimensions related to open scientific contribution               <ul style="list-style-type: none"> <li>Deposit or publication in open access digital repositories</li> <li>Sharing of data, methods, software and machine learning models</li> <li>Science open to society</li> </ul> </li> </ul> </li> </ul> <p>In addition, a table of possible metrics, sources and dimensions is provided to demonstrate the relevance and impact of the contributions submitted for evaluation.</p>
<b>Diversity</b>	<p><b>Description of how initiative recognizes and supports consideration of diversity contributions, outputs and impacts</b></p> <p>The recognition of diversity is embodied in the different evaluable categories, which are no longer as research-focused as in the previous system, but balance teaching, research, leadership and hospital activity for Health Sciences staff. "Sufficiency" must be achieved in all of these areas.</p> <p>In addition, the typology of contributions that can be valued as research results has been broadened, adding methodologies, data sets, computer programs and automatic learning models to the more traditional ones of scientific publications and patents.</p> <p>On the other hand, in relation to the evaluation of the academic career, new possible merits related to the impact of the activity developed, including not only the scientific impact but also the social and territorial impact achieved, are included in the academic career assessment. This becomes more relevant in the category of knowledge transfer and exchange with society, where a battery of possible contributions and results is included.</p>
<b>Intersectoral</b>	<p><b>Description of how initiative recognizes and supports consideration of intersectorality</b></p>



	<p>The reform of the assessment system has been strongly influenced by the need to recognize and promote intersectoriality.</p> <p>This impulse is most clearly evident in the category of knowledge transfer and exchange with society, which values: activities of a scientific, technical or artistic nature that generate economic value or social value through the transfer and exchange of knowledge; the exploitation of industrial and intellectual property rights; activities with social value; participation in institutional and corporate Chairs, or similar, which constitute a formula for collaboration with public and private institutions that, among their objectives, carry out knowledge transfer activities; activities in the field of the promotion of scientific, technological, innovation and citizen science culture; scientific advice to public administrations; legislative advice; knowledge transfer carried out under the protection of services provided by public or private entities other than the university administration, such as other public administrations, institutions or national or international organizations; industrial and intellectual property rights derived from research activities; participation in the team promoting Knowledge-Based Companies based on research activities; participation in the performance of clinical trials, etc.</p> <p>In addition, when evaluating applications in the field of Health Sciences, particular attention will be paid to professional activities carried out in hospitals.</p>
<b>Career-stage</b>	<p><b>Description of how initiative recognizes and supports consideration of career-stage</b></p> <p>A fundamental premise of the reform of academic career evaluation was that the stabilization (Lecturer) could be achieved at an earlier age. The previous system did not allow for stabilization until the age of 40-45, which had important consequences for the personal and emotional well-being of younger faculty members and, by extension, for the system as a whole. It is now guaranteed that stabilization can be achieved no later than 6 years after the completion of the doctoral thesis.</p> <p>Promotion to the rank of Professor requires not only teaching and research skills, but also leadership skills. It is therefore not only a question of having accumulated more merits, which is essentially a question of age, but also of having demonstrated qualitatively different activities. This is the first time in Spain that the concept of leadership has been included in the evaluation of academic performance for faculty accreditation. This is done with the intention of recognizing and promoting a central element in the most mature</p>

	<p>phase of the academic career: actions that demonstrate the ability to lead teaching and research teams; the education, training, mentoring and promotion of young teachers and researchers; university and scientific leadership and management; recognition and responsibilities exercised in scientific organizations and scientific-technical committees; or other equivalent leadership activities. In particular, the vision with which these activities have been developed, the challenges faced, the implementation of transformations and changes, the activities developed and the results achieved in the discipline or in the institution itself or, where appropriate, in the field favoured by its development (local, social, disciplinary, etc.) will be assessed.</p>
<b>Career-path</b>	<p><b>Description of how initiative recognizes and supports consideration of career-paths</b></p> <p>The reform initiated in 2023 has succeeded in opening a national debate on the need to move towards a new model of career assessment, not only in the evaluation and funding agencies, but also in universities and research centers.</p> <p>Many cases of research misconduct have been reported in the general media, which has helped the reform to be better understood both inside and outside academia. It is well known that the previous assessment model had created incentives linked mainly to the publication of the largest possible number of scientific articles published in indexed journals with the highest possible IF. The pressure exerted on researchers by this system has not only encouraged some bad practices, but has also had important consequences for careers, such as the replacement of teaching by research or the prioritisation of individual careers over collective progress.</p> <p>The reform is designed to reduce the pressure to publish, not only because the evaluation is no longer primarily focused on this category, but also because it is not based on a quantitative model (e.g., number of JCR Q1) but on quality, relevance and impact.</p> <p>This model also facilitates, as mentioned above, the reduction of the stabilization age and greater academic freedom to shape one's own career.</p> <p>Moreover, it recognizes that careers cannot be fairly assessed without taking into account personal/family situations, which we know condition academic development, especially maternity periods.</p>

<b>Toolbox</b>	<b>Description of related practical guides and toolkits</b>  In addition to the aforementioned documents on criteria: <ul style="list-style-type: none"> <li>• <a href="#">Table annexed to the resolution on criteria resolution</a> (in Spanish)</li> <li>• <a href="#">FAQ</a> (in Spanish)</li> <li>• <a href="#">Narrative CV template</a> (in Spanish)</li> <li>• <a href="#">Participation platform</a> (in Spanish)</li> <li>• <a href="#">New Code of Ethics</a> (in Spanish, published in the Official State Gazette)</li> </ul>
<b>Implementation</b>	<b>Description of implementation process</b>  <p>Since April 2023, when ANECA joined DORA and CoARA, various newsletters have been published to spread the reform to be carried out, and almost 30 public presentations have been held in different universities to explain the changes and dialogue with all the members of these institutions to answer questions and confront opinions.</p> <p>In addition, this first phase of information was reinforced by various campaigns through social networks.</p> <p>In the process of implementing the reform, the technicians of the university and scientific libraries were fundamental, not only because they carried out fundamental work in the field of open science, but have also because they resolved many of the candidates' doubts regarding the new metrics, the recommended sources of information and the completion of the narrative CVs.</p> <p>All the changes introduced by this reform required specific training for the research evaluation committees, so that they would know how to apply qualitative methods supported by the most appropriate quantitative indicators. This training proved to be crucial in managing the reform, but at the same time we found that it needed to be reinforced and extended over time.</p> <p>In January 2024, the first call for research assessment adapted to the new framework was launched, and in April the new academic career assessment system for the accreditation of Lecturers and Professors was launched.</p> <p>Currently (May 2024), we are designing the ANECA CoARA Action Plan and coordinating the Spanish National Chapter, together with CRUE and CSIC.</p>

<b>Uptake</b>	<p><b>Description of implementation uptake</b></p> <p>Direct:</p> <ul style="list-style-type: none"> <li>• More than 13,300 faculty members and researchers applied for the first call for research evaluation.</li> <li>• The new academic career assessment system for civil servant faculties, which was launched on April 1, is expected to receive around 7,000 applications per year, based on last year's data (2023).</li> <li>• In addition, this assessment model will be extended in 2024 to all Assistant Professors, which will lead to more than 16,000 applications per year, if we take as a reference the data of the previous year (2023).</li> </ul> <p>Indirect:</p> <ul style="list-style-type: none"> <li>• Inspiration for regional agencies and universities, especially due to the legitimacy granted by the process of participation of the university and scientific community (unprecedented in Spain).</li> <li>• Reference for all the institutions belonging to the Spanish National Chapter: some 70 universities and research centers and organizations.</li> </ul>
<b>Challenges</b>	<p><b>Description of identified implementation challenges/obstacles.</b></p> <ul style="list-style-type: none"> <li>• Cultural resistance to change: For decades an assessment system has been in place that prioritises scientific production, measured in terms of quantity rather than quality, relevance or impact. Careers have been measured by quantitative indicators, not contextualized, as in the case of IF. Although criticism of these incentives has become widespread over the years and is now in the majority, it has been seen an "objective" system, so there is considerable resistance to any kind of change.</li> <li>• Uncertainty and criticism due to the "subjectivity" of the new system: as with any profound or structural change, the reform proposed by ANECA has been criticised, partly because of the doubts or uncertainties that the new system may generate, but also because of the belief that the narrative model is "subjective" and "no numerical". Although in the scientific field peer review is the basis of any evaluation, in the context of the reform it is criticised for the arbitrariness and lack of predictability that the more qualitative methods may have.</li> </ul>

	<ul style="list-style-type: none"> <li>• We are facing a cultural change that will take time. The reform promoted in ANECA is only one year old, so it is still too early to consider that the objectives have been achieved or that the community has taken ownership of the process.</li> <li>• The new assessment system requires more resources because a more qualitative and contextualized evaluation takes more time. In addition to the higher cost of the evaluation itself, it is necessary to take into account the need for specific training measures, both for evaluators (new metrics, sources, dimensions, etc.) and for applicants (narrative CV, etc.), as well as for the entire university and research community. Therefore, not only training is needed, but also general pedagogy, including the public, who should be aware that the new assessment system will have an impact on a more robust academy and a more open science.</li> <li>• In addition to the resistance of the community itself, it is also important to highlight the pressure from those who "lose" with the new evaluation system, mainly private publishers.</li> </ul>
<b>Benefits</b>	<p><b>Description of identified implementation benefits.</b></p> <ul style="list-style-type: none"> <li>• The greatest and most far-reaching benefit is that we have helped to open a debate on the research and academic careers assessment in Spain. This is a debate that we all knew was necessary for many years, but that needed to be discussed not only in theory but also in practice.</li> <li>• The fact that ANECA, as a national agency, has opened this debate has encouraged other actors to move in the same direction and review their own evaluation models (regional agencies, universities, etc.).</li> <li>• Another of the fundamental advantage of the reform was the participatory way in which it was carried out, with the direct involvement of more than 3,500 people, which undoubtedly contributed to the ownership of the changes made.</li> <li>• The reform brings benefits for evaluators, who have regained a greater role in an evaluation model based primarily on qualitative methods.</li> <li>• It also benefits researchers by promoting a more inclusive and sustainable model, more committed to equality and inclusion, and allowing for greater contextualization of the career developed.</li> <li>• Finally, we can affirm that the new evaluation model is beneficial for citizens as a whole, as it decisively promotes open and citizen science.</li> </ul>

	In any case, more time will be needed to assess the benefits (and weaknesses) of this new assessment system.
--	--