

Working Group on Reforming Academic Career Assessment

Case study “NOR-CAM – A toolbox for recognition and rewards in academic careers”

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Country	Country/Region/International Norway
Name	Official name of the initiative NOR-CAM – A toolbox for recognition and rewards in academic careers
Institution	Name of the institution(s) responsible for the initiative Universities Norway
Stakeholders	Names of other organisations/communities involved <ul style="list-style-type: none"> • Research Council of Norway • Norwegian Directorate for Higher Education and Skills • Norwegian Association of Researchers (NAR) • NIFU Nordic Institute for Studies of innovation, research and education • Committee for Gender Balance and Diversity in Research (KIF) • Association of Norwegian Research Institutes (FFA) <p>All member institutions of Universities Norway:</p> <ul style="list-style-type: none"> • MF Norwegian School of Theology, Religion and Society • Queen Maud University College • Norwegian Business School • Inland Norway University of Applied Sciences • Molde University College – Specialized University in Logistics • University of South-Eastern Norway • Østfold University College • Volda University College • Western Norway University of Applied Sciences • Kristiania • Oslo National Academy of The Arts • Lovisenberg Diaconal University College

	<ul style="list-style-type: none"> • NLA University College • Nord University • The Norwegian School of Sport Sciences • Norwegian University of Life Sciences • Norwegian Academy of Music • Norwegian University of Science and Technology • OsloMet – Oslo Metropolitan University • The Norwegian Police University College • Sámi University of Applied Sciences • University of Agder • University of Bergen • University of Oslo • University of Stavanger • UiT The Arctic University of Norway • VID Specialized University • Ansgar University College • The Oslo School of Architecture and Design • Fjellhaug International University College • The Norwegian Defence University College • Østfold University College • NHH Norwegian School of Economics
Year	When the initiative was launched April 2021
Documentation	Link to the main document describing the initiative Full version: https://www.uhr.no/en/_f/p3/i86e9ec84-3b3d-48ce-8167-bbae0f507ce8/nor-cam-a-tool-box-for-assessment-and-rewards.pdf Short version: https://www.uhr.no/en/_f/p3/idc7ec543-fb1c-4659-bb0d-c57e9f486a02/nor-cam_short_english.pdf
Website	Link to the website of the initiative (if available) https://www.uhr.no/en/news-from-uhr/nor-cam-a-toolbox-for-recognition-and-rewards-in-academic-careers.5780.aspx (Information in Norwegian – more extensive: https://www.uhr.no/temasider/karrieropolitikk-og-merittering/vurdering-av-akademiske-karrierer/)
Summary	Brief description of the initiative The process leading up to the NOR-CAM report started in 2019 as

Universities Norway appointed a small working group (with a majority of renowned scholars) who started from an Open Science perspective but arrived at a flexible and holistic framework for recognition and rewards in academic research assessment. The ambition has been to develop a guide or a toolbox that adopts three core principles for assessment: more transparency, greater breadth, and comprehensive assessments as opposed to one-sided use of indicators. NOR-CAM is a framework for assessing these elements systematically and the elements can be combined for different purposes and needs. Such an expanded research assessment approach aims to incentivize and reward a broader range of academic activities, and ultimately to improve academic culture and the quality of research.

An important goal of the principles and framework is to make the assessment processes more transparent and predictable, both for the individual and for the institutions. What skills are needed for the position to be filled? How well does your own competence fit the position advertised? What are the requirements for promotion? The matrix combines the need for both greater flexibility and sufficient structure for recognizing and rewarding a broader set of results and competences needed for the universities to fulfil their mission in modern society.

Note on quality:

Developing a more balanced and open assessment system does not mean reducing the requirement for quality. Rather, it is about reducing the use of quantitative indicators as a 'proxy' for quality. NOR-CAM also builds on the principles from the Leiden manifesto, arguing that quantitative evaluation should support qualitative, expert assessment. NOR-CAM will make it easier to assess quality across the breadth of a candidate's activities. The goal is to have a more balanced use of quantitative metrics. We recognize that quantitative metrics can be useful. They can challenge biases in peer review and facilitate deliberation. We recognize that it is difficult to make judgements of colleagues without a range of relevant information. However, assessors must not be tempted to cede

	<p>decision-making to numbers. We want to move from a situation where the quantitative indicators have a leading role to a future, where they have a supporting role, a future where individual researchers are judged on a qualitative evaluation of their portfolio. We want to focus more on quality, content, academic integrity, creativity and contributions to research, education and/or society, and to recognize the academic's specific profile.</p>
Target audience	<p>Description of the main target audience of the initiative</p> <p>NOR-CAM and the associated framework for assessment can be used</p> <ul style="list-style-type: none"> • by the academic institutions upon announcement and employment of academic staff • in processes related to promotion from one scientific career stage to the next • by funders when assessing project managers and participants in connection with research applications • by the individual academic in their own career development <p>It may also represent a framework for evaluation of academic institutions and academic areas on a national level.</p> <p>Hence, the target audience is the whole ecosystem of academic activity.</p>
Geographical Scope	<p>Description of the primary geographical scope of application</p> <p>Norway is the primary geographical scope</p>
International potential:	<p>Description of the international potential for adaptation</p> <p>Academic activity is international by its very nature. People, funding and research output can and should all transverse national borders and continents. It does not make sense to reform in one country alone. So, of course, developing NOR-CAM was inspired by others. Most importantly was the Dutch Recognition and Reward project, as well as similar processes at the Federation of Finnish Learned Societies. Also the work in the EUA "Expert group on Open Science and Science 2.0" has highly influenced our work.</p> <p>A real shift towards new assessment practices requires multiple</p>

	<p>national and international actors to make changes. So when ARRA and CoARA came along with an agenda and key principles that largely overlapped with NOR-CAM's principles, it boosted the Norwegian uptake even further.</p> <p>Although the initial geographical scope has been Norway, we think that the NOR-CAM framework is generic in such a way that it may also be applied elsewhere, both on a national and European level.</p>
Goal	<p>Description of the intended change</p> <p>The goal was to create a simple, flexible, coherent and holistic framework for assessing a broader spectrum of academic results and competences in a more systematic way than before.</p>
Relevance	<p>Description of the key elements that are relevant for reforming career assessment</p> <p>Six principles should be taken into account:</p> <ol style="list-style-type: none"> 1. Measure quality and excellence through a better balance between quantitative and qualitative goals <ul style="list-style-type: none"> • Bibliometric indicators should be used responsibly and supplemented with other information 2. Recognise several competencies as merits but not in all areas at the same time or by each employee <ul style="list-style-type: none"> • The individual academic is not expected to excel in all areas. 3. Assess all results, activities and competencies in the light of Open Science principles <ul style="list-style-type: none"> • Openness should be seen as an integrated part of the academic activity 4. Practice transparency in the assessment and visibility of what should be recognized as merit <ul style="list-style-type: none"> • Individuals must know what criteria will be used to assess them and must be given insight into how the criteria are applied 5. Promote gender balance and diversity <ul style="list-style-type: none"> • Changes in the assessment criteria must be sensitive to impact on gender balance and diversity 6. Assist in the concrete practice of job vacancy announcements and assessment processes locally

	<ul style="list-style-type: none"> The framework should be a helpful tool in the recruitment and appraisal processes in the institutions and within the academic communities
Qualitative	<p>Description of recommendations regarding qualitative assessment</p> <p>In line with the next point, the aim is a better balance between qualitative and quantitative assessment. Quantitative information has to be supplemented with qualitative information. To assess quality in teaching, innovation and leadership, numbers do not bring you far. Structured documentation of a broader set of results and competences is needed.</p> <p>Hence, the fourth column in the matrix recommends the applicant to submit his/her own reflection on the various activities. The idea is that the applicant uses this column to give a subjective assessment of their own results and competencies, and to what extent it matches with the profile of the position/project. The aim is to facilitate interaction between the documentable and/or measurable quantities in column three and the applicant's qualitative assessment of these. This will ensure that quantitative measures and bibliometrics are only a part of the whole. A NOR-CAM-formatted CV will be a combination of lists of metrics, often expressed quantitatively, but also in the form of short narratives, as well as reflections on each of these.</p> <p>Besides, NOR-CAM makes room for an assessment system that recognizes the ability, competence and willingness to engage in collaboration, sharing and interaction, including across disciplines. Research activity is increasingly undertaken in groups. In this way, the (specialist) competencies and profiles of the individuals will become part of a larger whole in the research group, institute or faculty. The documentation here will normally be qualitative.</p>
Quantitative	<p>Description of recommendations regarding quantitative assessment</p> <p>Bibliometric indicators tell a story, but not the whole story. Figures and quantifiable measures must therefore be used with caution and supported with other information when making assessments related to appointments, promotions or the allocation of resources.</p> <p>We adhere to the following recommendations, given by The National</p>

	<p>Board of Scholarly Publishing:</p> <ol style="list-style-type: none"> 1. <i>Bibliometrics must not be used in isolation</i> Appointments, promotions, career follow-up and allocations of tasks and resources must be based on an overall assessment. In most cases, it is not only the research that needs to be assessed. However, even in assessments of research, bibliometric indicators are of limited value, because they are retrospective, take no account of the context and cannot replace decision-making responsibility. 2. <i>Bibliometrics do not look ahead</i> Bibliometrics point retrospectively to previous research activity. Assessments in the context of appointments, promotions or the allocation of resources must also look forward and appraise the possibilities for meeting the requirements and expectations stipulated. 3. <i>Bibliometrics do not understand varying contexts.</i> Research and academic activities take place in more or less active stages, depending on which other activities applicants are involved in, the resources that are available at any given time, and the type of projects and collaborations that the academic is engaged in. When allocating resources or deciding on appointments and promotions, committees and leaders have a responsibility to understand these variations. 4. <i>Bibliometrics cannot make decisions</i> When a large number of applications makes it necessary to carry out a screening process before a closer assessment of relevant qualifications is made, responsible use of bibliometrics can be one of several appropriate instruments. However, the value of using bibliometrics will decrease as the assessment process approaches the decision stage. Qualitative methods and a responsible decision will be needed.
Diversity	<p>Description of how initiative recognizes and supports consideration of diversity contributions, outputs and impacts</p> <p>NOR-CAM is made up of six categories:</p> <ol style="list-style-type: none"> 1. Research output, 2. Research process, 3. Pedagogical competence 4. Impact and innovation 5. Leadership 6. Other experience

	In each category, relevant results, experience, competencies and activities can be described, documented and reflected on. The matrix contains <i>examples</i> of relevant and typical competencies, activities and results for each of the categories in order to show what can be worthy of merit. But the list is not exhaustive. Components may be added or extracted to fit to the context in which they are to be used.
Intersectoral	<p>Description of how initiative recognizes and supports consideration of intersectorality</p> <p>NOR-CAM facilitates greater intersectoral practice. In Rows D. Impact and innovation, E. leadership and F. Other Experience, it is suggested that these are activities that should be merited.</p>
Career-stage	<p>Description of how initiative recognizes and supports consideration of career-stage</p> <p>NOR-CAM may be used on all career stages, from R1 – R4. It is e.g. possible to develop a set of four generic versions of NOR-CAM, one for each career stage.</p>
Career-path	<p>Description of how initiative recognizes and supports consideration of career-paths</p> <p>NOR-CAM may be used across all academic career paths; disciplinary, professions and art. This is because the results and competences required for different purposes (institutional profiles, types of positions, etc.) can be adapted accordingly.</p>
Toolbox	<p>Description of related practical guides and toolkits</p> <p>The NOR-CAM framework is in itself a toolbox or toolkit, meaning that all tools should not be used at the same time. We do not expect all to excel in all trades at the same time. Some competencies and qualities will be prioritised over others in e.g. vacancy announcements. Likewise, some “tools” will suit some academic fields more than others.</p>
Implementation	<p>Description of implementation process</p> <p>After the launch in 2021, the NOR-CAM model was presented to all UHR member institutions, and they were invited to comment on the proposed model. They were also asked whether they were in, or had plans for, any process of revising the assessment system. Most institutions answered positively on both.</p>

	<p>NOR-CAM was then recommended by the Board of Universities Norway, followed by discussions in our strategic units, as well as in dedicated meetings and workshops.</p> <p>Alongside with the discussions leading up to ARRA and then establishment of CoARA, we created the NOR-CAM network, gathering most of our institutions in a forum to exchange and learn how to implement the framework. Here we encourage each institution to develop their own institutional NOR-CAM (e.g. UiO-CAM at University of Oslo). Many of our member institutions are in this process now.</p> <p>The NOR-CAM network (now the Norwegian National Chapter) has one annual physical meeting as well as digital meetings in between, taking up advances and challenges regarding implementation of NOR-CAM, as well as activities and commitments for those institutions that are members of CoARA.</p>
Uptake	<p>Description of implementation uptake</p> <p>We see an uptake among quite a few of our institutions since they work locally on implementing their own version of NOR-CAM. Also 17 institutions have signed ARRA, and most are engaged in CoARA. Hence, they are obliged to work on reforming their assessment system.</p>
Challenges	<p>Description of identified implementation challenges/obstacles.</p> <p>To achieve the goals a cultural change is required. This takes time and is always difficult, although we seem to move in the right direction.</p> <p>But the greatest challenge is how to document competences and results, beyond publications. This is a challenge that is now addressed both nationally and internationally. We hope for some good solutions from the CoARA WGs.</p> <p>Another challenge is for young researchers to work strategically with their academic career in this transitional phase, going from “publish or perish” to “excel in all other trades as well”. The “rules” for how to grow a career might seem more complicated or blurred.</p>
Benefits	<p>Description of identified implementation benefits.</p> <p>It is necessary to implement these changes together with the</p>

	<p>academic staff. It cannot be imposed. We think one reason that NOR-CAM has been received relatively well is that it is flexible, meaning that it caters both institutions that are more cautious and those who want to move faster or work in a different way. The job is not finished (e.g. the documentation challenge), and involving the academics in how to improve the framework will be important in the time to come..</p>
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