

Review of the University of Gothenburg's RED 19's quality system regarding external collaboration in research.

July 10, 2019

Summary and recommendations

In early 2019, a panel of independent experts was appointed to review collaboration activities at the University of Gothenburg (UGOT, henceforth). The review was done in conjunction with (and part of) the university's large research assessment, RED19, and is based on the self-evaluations done by the units of assessment, in particular the issues that dealt with the goals and practices of collaboration. The panel notes that the self-evaluations showcase an array of excellent examples of external collaboration in research. It is impressive to read the width and depth of research activities conducted together with, or commissioned by, external organizations. There is no doubt that UGOT is deeply immersed in the societal fabric of its immediate region in West Sweden, as well as nationally and internationally integrated. When it comes to research relevance and social impact, UGOT makes a significant contribution, in the form of start-ups, open software, participation in open debates, strategic partnerships, and the development of national and international guidelines.

The texts supplied from faculties and institutions bear witness to a high level of ambition when it comes to interaction with extramural agents. The units have developed extensive collaboration with non-academic stakeholders throughout the years. Collaboration is taken seriously, with a recently appointed Deputy Vice-Chancellor responsible for issues regarding outreach and cooperation, and some faculties have created Vice-Dean positions for external collaboration. The different organizational levels all seem to recognize the importance of external collaboration, that it brings a different viewpoint to research, and that such ties enrich both research and education. All departments involved in the self-evaluation have made a considerable effort to show that they take collaboration with external stakeholders seriously.

While acknowledging all of these strengths, the panel notes that there are opportunities for improving and enhancing collaboration at UGOT, as well as in the measures deployed to assess and gauge collaborative activities.

To begin with, collaboration must be motivated and anchored in a set of ambitions and goals. Ideally, it should serve as a vehicle to create and sustain demand for research within society. It should, in addition, enable the management and solution of problems that cannot be solved otherwise. By confronting research with real-life problems, collaboration should also enrich academic work and enhance the relevance and quality of research. By formulating such general ambitions for collaborative activities, UGOT would direct strategic decisions on when and how to engage in collaboration, thereby pointing out areas and activities in which the university should engage, but also identify pitfalls as well as engagements that it should refrain from.

In some instances, the panel finds ample evidence of such strategic considerations of the goals and benefits of collaboration, as well as its risks and limits. These positive observations notwithstanding, the panel found recurrent deficiencies in the framing of collaboration – why it

should be done, with what motives and purposes. Some of the self-evaluations fail to identify the benefits that collaboration may provide to the units, with missed opportunities to use it as a vehicle for relevance and quality enhancement. In others, collaboration emerges as a ubiquitous phenomenon with few if any constraints and limitations, where societal expectations seem to form the single most important basis of research activities, possibly to the detriment of quality, and even jeopardizing the integrity of the institutions involved.

Another challenge concerns the overall direction and coherence of collaboration. Some units reported only limited oversight of their collaborative activities, with whom they collaborate and the procedures and ultimate motives of collaboration. What lies behind this opacity is not clear to the panel, and it cannot be ruled out that some of the undisclosed collaboration may be of a less relevant, or even doubtful, nature. Other units reported a jumble of activities, some of which are not really genuine collaboration but rather outreach and research information, which indicates a weak understanding of the aims and goals of research collaboration. These deficiencies resurface at the level of faculties and university management, where strategic goals and ambitions to some extent are vague and non-committal. The UN development goals have been suggested as one way of framing the strategic direction of UGOT's research collaboration. Judging by the self-evaluations, the development goals do not yet serve as a particularly strong guiding device for collaborative activities; the reports of alignment with the development goals are, with some notable exceptions, mostly done in the form of enumerations rather than articulations of strategic ambitions.

Strategy is a necessary condition for beneficial and sustainable collaboration. Another critical element lies in the procedures of collaboration. While collaboration is often rewarding, it is a complex activity that entails trade-offs of various kinds, ethical dilemmas, and the need for both flexibility and predictability in the interaction with stakeholders and collaborative partners. If collaboration is intended to reinforce quality and afford collaborative networks and real-life problems, carefully crafted procedures are needed to govern and shape collaborative practices. A first and most critical element is priority-setting, indicating where, how and with whom to collaborate. Such procedures need in addition to articulate how networks of collaborators are shaped, how practices are governed and conducted, and how considerations of integrity and relevance are balanced. They should also provide a framework for the governance of intellectual property as well as the appraisal of collaborative experience in hiring and promotion decisions.

When it comes to the practice of collaboration, the panel finds a similar variety as for strategies. Some units have a clear understanding of how collaboration should be organized and practiced. They have developed measures and methods of recruiting collaborative partners, of managing intellectual property, communicating their collaborative activities, and dealing with issues of integrity and potential conflicts of interests. Others seem to perform collaboration in an opaque manner, where the goals and practices remain undisclosed and not subject to any specific guidance or governance from formal bodies of the university; presumably they are of a personalized form where one or several academics collaborate with partners in society. Yet others display an erratic approach, where collaboration is rare, and where procedures are devised on a case-by-case basis. The formal university levels - central leadership, faculties, and departments - seem to have only limited oversight and transparency of collaborative practices, and a limited conception of how collaborations may be sustained over time and how benefits might be gauged and enhanced. The panel found no evidence of a systemic approach to how collaboration should be rewarded in hiring and promotion decisions.

While recognizing the historical legacy and continued significance of the "teachers' exemption", the university nevertheless should ensure that collaborative activities do not risk harming the

university's reputation or creating untenable relations with external partners. In addition, the panel suggests that UGOT urgently develops a policy for the appraisal of collaboration in hiring and promotion decisions, and that it considers using its strength in media research to develop a university-wide platform for communication about collaboration, including the inception of continuous training on various aspects of research-based collaboration.

Finally, as to the evaluation and assessment of collaboration, the panel recognizes the efforts that have been put into the RED19 process as the first inventory of collaboration within UGOT. The RED19 secretariat has identified the most important dimensions of collaboration in its commission to the units of assessment. In doing so, and in returning to the issues over time (which UGOT should, in future RED exercises), it will enable learning within each unit as well as between units. Furthermore, such an exhaustive overview should function as strong underpinning of any strategic endeavor in the future. The panel noted some shortcomings in the process, mostly by omission rather than by commission with units not fully responding to the issues raised in the self-evaluation template. The panel also recommends that UGOT in future evaluations underlines that answers should be of a reflective nature, and that units that abstain from reflection in their self-evaluations should be asked to resubmit their responses.

On the basis of these observations, the panel affords the following suggestions for improvements:

- Elaborate university-wide strategies and principles for collaboration. Keywords for such a program could be quality of research, transparency, and integrity.
- Strengthen the dialogue between central university leadership, faculties and departments, when devising, implementing, and assessing such strategies and principles
- Elaborate measures of assessing what is to be achieved in collaboration. When possible, routines for formal evaluation should be coupled to such measures.
- Enable collaborative learning - collect and assess collaborative practices, and create a university-wide platform for such learning
- Strengthen communication on collaboration - and consider establishing a special function for science-informed journalism for practitioners in the area
- Establish systematic and transparent reward and incentive structures for collaboration
- The UN development goals are a useful starting point for collaboration but needs much more refinement, concretization and specification, if they are to structure collaboration
- The instructions for self-evaluations should be reworked to ensure that answers are aligned with instructions
- Invite continuous reflection on outcomes, procedures and practices of collaboration, and do it systematically to improve the foundation for collaboration strategies and procedures

The panel's set up and instructions

UGOT is undertaking an ongoing quality evaluation of research, named RED19, Research Evaluation for Development. It is expected to be complete by the end of autumn 2019. The evaluation is focusing on research conditions and processes. It will contribute to the University's Vision 2020 objective of maintaining research of high international class and quality.

The first step, which is now completed, consisted of a self-evaluation for the University management, the eight faculties and their departments to reflect on the existing conditions and processes for ensuring quality of research. One section of the self-evaluation addressed specifically the question of collaboration with external stakeholders, as well as Impact and social relevance of our research.

In this context, the university asked a group of external experts to help to self-reflect on and improve RED 19's self-evaluations to assure quality of collaborations with non-academic actors in research.

The panel convened on 24th and 25th of June 2019 at Klädesholmen, Tjörn. It included five members:

Mats Benner (chair of the panel), Vice dean at the Lund University School of Economics and Management

Harald Castler, CEO of Getinge Life Science and chairman of the board of Halmstad University
Ingrid Elam, Professor and critic

Helena Lundberg Nilsson, Director of regional development at Region Västra Götaland

Per Molander, Swedish official and advisor in public policy issues

The panel of reviewers was provided with:

- The complete RED 19 self-evaluation template
- The compilation of answers from faculties and departments to the questions on Collaboration with external stakeholders (C.1.2) and Impact and societal relevance (C.2)

Foundations of the review

Collaboration is a central aspect of contemporary academic life. In its self-description, UGOT highlights that it “meets societal challenges with diverse knowledge”, that it “works actively for sustainable development” and that it “contributes to a better future”. Such general claims shape virtually all higher education institutions in our time: they aim to interact and serve, in a manner which improves social, environmental and economic conditions. The forms and shapes of collaboration are complex and difficult to pinpoint, however. Universities engage in everything from lectures in public libraries to partnerships with large corporations, and from forging spin-offs to advising non-governmental organizations. The area of collaboration, while as old as the university itself, is therefore subject to very different principles depending on the type of activity, partnerships and aims. Given the rising expectations on universities to contribute to the resolution of challenging societal issues, and to the development and deployment of new knowledge more generally, there is – the panel argues – a need to establish principles, strategies and procedures for collaboration. Setting such overarching goals for the plethora of collaboration activities in academic institutions will ensure that collaboration is mutually beneficial to universities and to partners in society, that it meets high standards in integrity while contributing to relevance, and that the university ascertains that collaboration does not undermine its role of as a provider of reliable and public knowledge.

Observations

During the panel, the reviewers discussed two main aspects: 1) the collaboration capacity of UGOT – based on the information provided and their respective pre-knowledge about external research collaborations of UGOT and other Swedish and international universities; and 2) the research quality system currently in place at UGOT – based on the self-evaluation instructions of RED 19 and their respective pre-knowledge about self-assessments and quality systems.

The panel evaluated the general quality of the answers against what the self-evaluation form was asking for and what the evaluators required to be able to assess it and agreed on the following observations.

Strong variation of types and intensity of collaborations

Unavoidably, the activities reported are highly variegated, given that conditions for collaborative activities differ substantially between the disciplines. Some disciplines connect more easily to society than others, and have what appears to be a natural and strong collaboration with external stakeholders. Others operate in fields with sharper demarcations between research and practice, and their experience will necessarily be different. The reports also differ in their level of analysis. Some come close to pure enumerations of activities, whereas others attempt to bring some structure into their reporting. A number of descriptions lack an assessment of the strengths and weaknesses, and proposals for improvements. In some cases, the texts convey the existence of a clear vision of the goals of external research collaborations and/or awareness of starting something new, exploring a new approach or being in the process of setting new strategies to achieve the goals. Others only describe what they do, not how it enhances the quality of research.

The enumerations of activities sometimes also tend towards an exercise of showcasing good examples, but the self-critical aspect is often missing, with some exemplary exceptions.

The panel observes that such wide differences could be ameliorated through a more coherent stance towards what collaboration is, how it may be pursued and for which purposes, and how its impact and outcomes may be assessed.

Absence of principles and criteria

Although the lists supplied are ambitious and comprise high-quality activities, there is in general no apparent set of principles guiding interaction with outside society, or criteria to be used for selecting certain projects and turning other candidates down.

The boundaries between collaboration and popularization, or with consultancy, are sometimes unclear. Quite a few activities seem to be more of a supportive nature rather than mutually reinforcing or beneficial. This entails a risk of falling into the role of consultant in an excess of commissioned research. This may also reflect a lack of strategic direction. The reports often indicate that it is either external partners or the individual researchers who are driving the agenda, only rarely the faculty or department. The risk becomes even greater when there is no awareness of who holds the power in the relationship and steers the direction the collaboration activities of the department or faculty. Some departments appear to be too close to their collaborative partners, and would benefit from some distance keeping.

By mutually beneficial or reinforcing, we mean a process marked by mutual respect of the respective competences of the partners involved, and how they can be used to achieve something that is more valuable than isolated activities. The university should set guiding principles and criteria to ensure that collaborative activities serve this laudable goal.

Bottom-up based collaboration model based on individual initiatives

Research collaboration with external stakeholders at UGOT has predominantly grown organically from individual initiatives. Overall, we see a picture of a predominantly bottom-up based collaboration model largely based on individual initiatives. Only in some instances was the panel notified of more systematic models for societal engagement. Again, while the historical foundation of collaboration in Swedish universities make the individual academic the most important carrier of collaboration, this does not preclude a more coherent and active approach from the university's side. As a minimum, all collaborative efforts, including those initiated by individual academics, should be beneficial to the overarching goals of the university, and deviations from that ideal should be rectified.

More generally, work is needed to be clear about why academics engage in collaboration and what it brings to them. Examples of questions that need to be asked are: What does the external collaboration mean to your department/faculty? Why do the department's researchers engage in it? What kind of impact is intended? Guidelines and criteria for interaction with external stakeholders should be laid down in order to bring some structure into the field of collaboration. Some departments display a tradition of constantly discussing how to keep distances and draw the limits of their collaborative work, whereas other do not seem to have that discussion - or at least not visibly in the reports.

Proactively create and manage demand for academic knowledge and skills

In case of low demand from external partners, some faculties or departments seem to be satisfied with reporting a collection of isolated individual initiatives. In case of high demand from externals

partners, respondents seem to consider the large amount of collaboration as a core asset, without weighing possible risks that such an approach entail.

In both cases, units run the risk of becoming only reactive to the opportunities of collaboration. Low demand bears the risk of becoming defensive, and excess demand bears the risk of departments becoming overloaded. Units should be far more proactive in their approach to external demand and ensure that they themselves articulate the opportunities and risks of collaboration.

Transparency is crucial

In many self-evaluation reports, no principles or criteria for selection and prioritization of certain type of external collaboration were discussed. Their foundations of collaboration emerged as opaque and based on initiatives and networks outside the reach of the university. Again, while this is a reflection of the historical development of collaboration in Sweden, there is a need of weaving a red thread among the either isolated and/or numerous initiatives and building a coherent understanding of the effects of collaboration. Increased self-awareness at faculty or department level is a necessary condition for ensuring collaborations to be beneficial in terms of mutual benefit, openness, participation and integrity for all collaboration partners¹. It would also help to reduce risks for the university: in case of conflicts, it will be easier to know who is responsible and manage the problem accordingly. Being more articulate and self-aware also helps to unlock new resources.

Enhance dialogue and interaction within the university

A university is a complex organization with multiple decision-making sites and levels. It is striking that the faculties' answers do not fully capture the richness of the departments' responses, nor do they provide an umbrella for how collaboration should be understood and executed. Some of the departments/faculties have a clear strategic agenda and strategy for collaboration and impact, whereas others do not mention the strategic and long-term ambitions. Such strategic variation requires an awareness of the different practices but also concerted efforts to bring about a coherent culture of collaboration.

The fact that answers were predominantly descriptive, functioning as catalogues of collaboration and lack of demonstrated effects is not only caused by either lack of prior self-reflection and strategy, or the type of self-evaluation questions. We understand that this reflects the decision-making structures of academic units in Sweden, where departments have many functions but not necessarily to act as a strategic node for collaboration. Having noted this, we still want to point out that coordination is a prerequisite for the governability of collaboration. This would include working out common guidelines and policies together with the faculties and have them implemented at the departmental level. Departments repeatedly ask for this in the self-evaluations, and the university management should heed that request. The reports send a clear call for a common frame, and it is possible to do so even if there is a strong diversity among faculties and departments.

The opportunities and limits of the UN sustainable development goals

The specific use of the UN sustainable development goals is potentially useful as an example of societal processes and their significance for universities, if however not easily translated into an

¹ "Ömsesidighet, öppenhet, delaktighet, integritet för inblandade parter" (SUHF expertgrupp för samverkan, 2018)

assessment of the quality, or impact, or relevance of collaboration as judged by the responses. More work is needed to refine the goals if they are to serve as beacons of collaboration.

Merits, rewards and strategic recruitment and promotion

There is a general lack of consistency of reward and incentives for external collaboration in research. The texts acknowledge the importance of them, but this is not reflected in procedures of recruitment or promotion. Practices vary across the university: from totally inexistent to strong commercial external reward. The lack of integration of external collaboration in the academic merit system bears important risks in term of who drives the agenda of the collaboration. In the absence of academic reward, external rewards, such as extramural income, may come to determine the value and direction of collaboration.

Most departments identify the lack of internal reward as a hurdle and are asking for incentive programs and formal structures to stimulate and support external collaboration and utilization of research as merit. It is of urgent importance to meet these expectations.

Dissemination of good examples

RED 19 highlights a large number of exemplary approaches to collaboration, and the university should ensure that such examples are used to enhance the collaborative efforts of the entire university. Mechanisms should be put in place to highlight and communicate such good examples, and promote learning between faculties and departments and strengthen the cooperation with other universities. While this review has eschewed from singling out specific departments and faculties, it nevertheless wishes to highlight a few such outstanding cases

- Biomaterials is exemplary in dealing with the interface between academic work and commercialization.
- BioEnv is exemplary in its capacity to formulate strategies, measures of implementation and assessing the impact of collaboration in a double-loop model
- The faculty of fine, applied and performing arts is exemplary in regard to its integration of external stakeholders in setting goals and aims of collaboration. The initiative of contacting *Kulturanalys* in order to investigate the possibilities of causal evaluation of its activities is noteworthy.
- The Department of Marine Sciences has by hosting the Centre for Sea and Society (CSS), developed an excellent platform with clear guidelines and policies for societal interaction

In addition to these four, the panel wants to highlight that

- Indigenous competence and expertise in innovation and entrepreneurship management is an asset; however, it is diluted across the university and there is a need to form a coherent stance and organizational model. If this is achieved, UGOT as a whole would excel in integrating research and practice in the area of collaboration.

Evaluate and learn

Follow-up of activities is nowadays standard in public institutions. Evaluation, in the sense of causal evaluation, represents a higher level of ambition and functions as a necessary underpinning for a university which aims to be a globally recognized academic environment. The university management should decide to engage in regular evaluations of collaboration strategies, procedures and outcomes, and set the general format of such activities (in terms of a framework,

frequency). Ideally, it should continue the process of assessing collaboration in RED19 on a regular basis.

Some observations regarding the self-assessment approach

Although self-evaluation is an acknowledged method to evaluate the quality of collaboration, impact and social relevance, there is a substantial risk that the self-assessment is reduced to anecdotal descriptions of activities lacking the strategic analysis of, for example, strengths and weaknesses. The instructions of the template emphasize the need for self-reflection and to propose constructive improvements. However, a number of the RED 19 self-evaluations lack this part of the analysis.

A re-formulation of the template would be helpful. Questions leading to a possible yes or no-answer, like for instance “Does your department...” ought to be replaced by questions inviting reflection, for instance, “How, in your strategy, do you allocate resources...”. It would also be useful to insert specific questions regarding development of quality through collaboration with non-academics, such as “How do you value research collaboration with non-academics, as compared to collaborations within academia? What research questions cannot be answered without such collaborations”, and so on.

It is recommended to further develop the section about management and support, with a deeper analysis of the strengths and weaknesses and questions around what support the faculties and departments would like to have from the university management.

The questions could also invite a higher degree of documentation of effects, asking for a reconstruction of the “pathways to impact”, in terms of identifying and mobilizing stakeholders, working with them at different stages of the pathway, and dealing with issues of ownership, credit, conflict of interests and so on.

The self-assessments could be further complemented by impact studies and relevant indicators such as external financing, shared employments, co-publications, open source publication, patents etc., as suggested by the Swedish Research Council (in: *Vetenskapsrådets redovisning av regeringsuppdrag att utveckla uppföljning av svensk forskning, 2018*).

If the self-assessment includes a strategic analysis of strengths and weaknesses/areas of improvement together with this kind of data supporting the qualitative analysis, self-evaluation is a good approach to evaluate the quality of collaborations.