

Die Neue Hochschule DNH

FÜR ANWENDUNGSBEZOGENE WISSENSCHAFT UND KUNST

Forschungsbewertung

Brunotte, Thomas; Jaekel, Martin;

Lewandowska, Kamila; Ochsner, Michael:

Reforming Assessment of Applied/Practice-Based Research

In: Die Neue Hochschule, 2024-4, S. 16-19.

Permalink:

https://doi.org/10.5281/zenodo.11562240

Impressum

Herausgeber:

Hochschullehrerbund – Bundesvereinigung e. V. *hlb* Godesberger Allee 64 | 53175 Bonn

Telefon: 0228 555 256-0

Chefredakteur:

Prof. Dr. Christoph Maas Molkenbuhrstr. 3 | 22880 Wedel Telefon: 04103 141 14 christoph.maas@haw-hamburg.de (verantwortlich im Sinne des Presserechts für den redaktionellen Inhalt)

Redaktion:

Dr. Karla Neschke Telefon: 0228 555 256-0 karla.neschke@hlb.de

Gestaltung und Satz:

Nina Reeber-Laqua, www.reeber-design.de

Herstellung:

Wienands Print + Medien GmbH Linzer Straße 140 | 53604 Bad Honnef

Erscheinung:

zweimonatlich

Verbandsoffiziell ist die Rubrik "*hlb* aktuell". Alle mit Namen der Autorin/des Autors versehenen Beiträge entsprechen nicht unbedingt der Auffassung des *hlb* sowie der Mitgliedsverbände.

ISSN 0340-448 x

Persistent Identifier bei der Deutschen Nationalbibliothek:

https://nbn-resolving.org/ urn:nbn:de:

101:1-20220916145

16 FORSCHUNGSBEWERTUNG DNH 4 2024

Reforming Assessment of Applied/ Practice-Based Research

This article examines the cooperative quality of applied/practice-based research as a criterion for research quality assessment and discusses changes to application and selection procedures.

Dr. Thomas Brunotte, Dr. Martin Jaekel, Dr. Kamila Lewandowska, and Dr. Michael Ochsner

The Coalition for Advancing Research Assessment (CoARA) is a coalition of more than 700 universities, scientific organisations, research, and funding institutions from all over Europe. They are united by a common agreement they all have signed (CoARA 2022). The aim is to reform the quality assessment of research, moving away from quantitative or bibliometric indicators towards a more open system that recognises and uses a greater variety of quality criteria, indicators, and measurements. Together with Zurich University of Applied Sciences (ZHAW), the hlb-Bundesvereinigung has initiated a working group within the coalition which aims at reforming research assessment of applied/practice-based research (CoARA 2023). The participants come from Switzerland, Germany, Finland, Austria, the Netherlands, Portugal, Hungary, Sweden, and Norway. On 13 June 2024, representatives of the applied sciences from the fields of social work, nursing, physiotherapy, ergotherapy, midwivery, and health sciences from all over Europe met at a workshop in Zurich which was conceptualised by co-authors Kamila Lewandowska and Michael Ochsner to discuss possible reforms for research quality and impact assessment in the applied sciences. The rationale behind the workshop was to examine to what extent existing models from the social sciences can be transferred to quality assessment of research in the addressed disciplines and whether social work and health disciplines can converge on shared quality criteria and indicators.

Particularities of applied/ practice-based research

At first glance, there are some special features of applied or practice-based research that certainly warrant different quality criteria than for basic research or may differ in significance and weight to different criteria. Firstly, this is the collaborative nature of applied research. Very often applied or practice-based research is geared towards collaboration with partners, especially those outside the university sector sometimes collectively termed practice partners. These can be companies, public

offices, or third sector organisations. The very fact of building such bridges is often seen as proof of the quality of applied or practice-based research (e.g. Oancea & Furlong 2007; Shaw & Norton 2008). At the same time, collaboration with practice partners can take various forms, depending on practitioner involvement, stakeholder roles in the research process, or the occupational status of the researchers. For example, Shaw and Lunt (2018) differentiate between research conducted as a form of "co-operative venture" between academics and practitioners and research undertaken by practitioners in community-based settings ("practitioner-led research"). These two types of research have their own specific approaches to working relationships, research designs, methods, and dissemination formats. Consequently, they require suitable quality standards and evaluation methods that may differ from those used in basic research. For instance, traditional research outputs, such as articles in scientific journals, may be insufficient for assessing the quality of collaboration between researchers and stakeholders, underscoring the need for tailored evaluation criteria and procedures.

A second aspect is the strong integration of applied or practice-based research into teaching activities, which plays a more fundamental role at UAS than at traditional universities. On the one hand, conducting practice-based research helps UAS professors better understand and improve their own teaching practices, and as a result contributes to their professional development (e.g. Willemse 2016; Van Veldhuizen et al. 2021). On the other hand, the involvement of students in applied or practice-based research may lead to more interesting career opportunities – a fact which is repeatedly cited as proof of the quality of this kind of teaching related research.

And thirdly, applied R&D is designed to have an impact on the respective region. In many cases, UAS are important knowledge providers for practice partners which makes them drivers of innovation that foster economic, ecological, and social development in their respective region.

DNH 4 2024 FORSCHUNGSBEWERTUNG 17

The Approach

However, the above-mentioned characteristics of applied or practice-based research are not yet values in themselves and also require further explanation as quality assessment criteria. In order to achieve this, in the Zurich workshop a model from the social sciences has been used to take a closer look at the respective quality assessment criteria. The scheme is taken from an article by Michael Ochsner (2022) "Identifying research quality in the social sciences", see figure 1.

In the context of this model, quality of research is understood as a latent construct. Such latent constructs require explication and thus need to be defined in more detail through quality criteria. This definition reveals the main dimensions of the concept. These can be, for example, the collaborative aspect, the integration into teaching, or the impact on the respective region. In a third step, suitable aspects for the definitions presented can be identified; where this is possible, corresponding indicators can be defined. For the quality assessment of research, it can also be helpful to know that these aspects exist and are relevant even if they cannot be measured by indicators. Furthermore, the indicators do not have to be quantifiable, but with their help it should be possible to show that a respective quality criterion holds true for a specific project or way to conduct research.

The criterion of collaboration as an example

This article will now take a closer look at the criterion of collaboration as an example, as elaborated in one of four sub-groups at the workshop. This example will be used to illustrate the workshop's approach. It was agreed upon that good applied research leads to (long-term) partnerships with practice partners in a role as co-learners in the project. For the sake of simplicity, we will focus on aspects of collaboration that may be relevant for a grant application.

Quality Criterion: Collaboration

Aspect 1: Good applied research leads to (long-term) collaboration.

Whether applied research is based on collaboration can be assessed through the work plan (types of interaction, contributions of practice partner, previous collaborative results, share of responsibilities and tasks within the project, data sharing, etc.).

Aspect 2: Good applied research contributes to bringing together different stakeholders.

 Whether applied research contributes to bringing together different stakeholders is reflected in the stakeholder map.

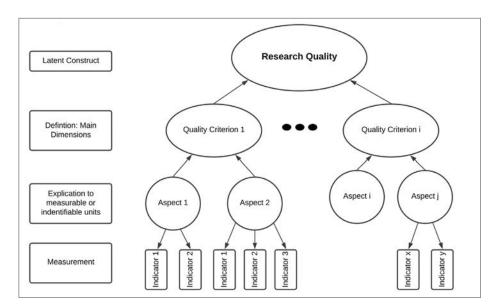


Figure 1: Schematic representation of a conceptualisation or research quality as a higher order formative construct (graph credits Ochsner 2022).



DR. THOMAS BRUNOTTE Managing Director hlb-Bundesvereinigung ORCID: https://orcid.org/ 0000-0001-7101-6171



DR. MARTIN JAEKEL
Head Research and Development
& Technology Transfer
Zurich University of Applied Sciences



DR. KAMILA LEWANDOWSKA Assistant Professor Science Studies Laboratory Center for European Regional and Local Studies University of Warsaw ORCID: https://orcid.org/ 0000-0002-2189-239X



DR. MICHAEL OCHSNER
Senior Researcher
FORS
Swiss Center for Expertise
in the Social Sciences
University of Lausanne
ORCID: https://orcid.org/

0000-0002-1758-9590

Permalink:

https://doi.org/10.5281/zenodo.11562240

18 FORSCHUNGSBEWERTUNG DNH 4 | 2024

"Anyone wishing to stimulate cooperation between researchers and partners outside academia is therefore well advised to cater to different cultures in terms of proposal design and project selection."

Aspect 3: Good applied research brings together and integrates different competencies.

 Whether applied research brings together all relevant competencies is reflected in the matrix of competencies.

Aspect 4: Good applied research contributes to change at the practice partner.

- Whether applied research contributes to change is reflected in the role of the practice partner (practice partner is involved in the role as co-learner, research literacy increases at practice partner, etc.) or the implementation of the results of the project (the practice partner's processes / services / products etc. are adapted).

In this example, it has become clear how a differentiated definition of the quality criterion of collaboration can provide indicators for particular aspects in its quality and impact assessment. The discussion during the workshop showed that a welldeveloped work plan, a schematic representation of the specific competences that the project participants contribute (matrix of competences), an overview of the stakeholders involved (stakeholder map), or a clear and balanced distribution of responsibilities and competences of a project's work packages can provide good information about whether a project is truly collaborative and whether joint results are being achieved through collaboration. This is particularly important when partners are involved who do not have a research background. Consequently, such features of a project application may also play a more important role in assessment processes than a detailed project description.

Ways to new formats of grant writing and assessment procedures

The aforementioned indicators for a good project proposal necessitate a work plan, a stakeholder map, a matrix of competencies, and a balanced distribution of responsibilities for work packages and, thus, require additional paperwork that can make preparing an application even more complex. However, they could and should replace existing

elements leading to a gain in efficiency in grant writing and particularly also in grant assessment. Against this background, it can be useful to further differentiate selection processes. While it is often customary for basic research projects to evaluate research proposals solely on the basis of a written application, it may make sense to further adapt the selection process if the quality of the collaboration plays a decisive role in the quality assessment, as it is the case with projects from the applied sciences. Here, for example, it may make sense at least in some cases to invite the project participants to an in-person project presentation in front of an expert review panel. This is because the joint presentation can also reveal how well the partners already know each other, whether they interact with each other as equals, show mutual interest, and can each contribute their own perspectives on the project and the collaboration. This can also be evidence of a good cooperation. Furthermore, if one puts emphasis on such a project presentation, it is possible to largely dispense with a detailed description of the project in the written application. A brief description of the project idea, the research approach, and the methods to be used seem to be sufficient. This much shorter written application could then be supplemented by the above-mentioned overviews such as the work plan, the matrix of competences, the stakeholder map, or an overview of the distribution of work packages. Overall, this still leaves a shorter application - and perhaps one which can easier be written together with cooperation partners outside academia who may not be used to writing research grant applications. It is possible that these partners are more accustomed to other application and funding formats, such as those used in the field of business development or start-up funding. These could be ideas competitions, road shows, hackathons, or even pitch formats. Moreover, such a targeted evaluation procedure comes also with the advantage of reducing negative steering effects or misuse of indicators as the discussions focus on the specific context of the project.

Anyone wishing to stimulate and foster cooperation between researchers and partners outside academia is therefore well advised to reflect upon the respective calls for proposals and funding procedures to the project participants involved and to cater to different cultures in terms of proposal

design and project selection. Hence, such reflections should be an important element of future call designs that seek to fund applied or practice-based research. Initial experiments with such selection procedures have already been carried out as part of the "DATIpilot" programme in Germany.

In addition, the workshop participants also see more room for innovation in selection procedures: considerations could be given to the question whether non-academic experts from the practice field should be included as peers in the respective review panels. This may also be an adequate step to include expertise with respect to all the partners involved in a cooperative research project as is also practiced in impact evaluation in basic research (Derrick, Samuel 2016, Luo et al. 2021).

Furthermore, the participants at the workshop all agreed that applied research must live up to the highest quality standards and that applied research is in this respect no different than basic research. After the identification, analysis, and consolidation of context-/discipline-specific quality criteria for applied and practice-based research a comparison with existing quality criteria for basic research is recommended to facilitate the implementation of assessment practices valuing applied and practice-based research.

Conclusion

High quality standards are just as important for the evaluation of applied research as for basic research. Using the quality criterion of cooperation as an example it was shown that there is potentially significant added value with respect to analysing and adapting the assessment of applied research, not only in identification of new or weighting of existing quality criteria but also in adaptations to calls for proposals, application formats, selection procedures, and adaptions to the review panels. Written applications, for example, may be much shorter if in-person project presentations are considered and if they are supplemented with a comprehensive work plan, a stakeholder map, a matrix of competences, or a balanced distribution or work packages. Reflecting the transdisciplinary composition of a project consortium, it also makes sense to add experts from the practice field to the review panel.

The results of the discussions at the workshop in Zurich will now be further analysed and reflected upon within the CoARA working group. A further workshop on the regional impact of applied research will take place in September in Brussels. Readers who would like to provide information on suitable selection procedures and quality criteria for the assessment of applied or practice-based research are cordially invited to contact Thomas Brunotte (thomas.brunotte@hlb.de).

- Coalition for Advancing Research Assessment (CoARA): Agreement on Reforming Research Assessment, 2022. https://coara.eu/app/uploads/2022/09/2022_07_19_rra_agreement_final.pdf viewed 14 June 2024.
- Coalition for Advancing Research Assessment (CoARA): Towards Transformations. Transdisciplinarity, Applied/Practice-Based Research, and Impacts, 2023. https://coara.eu/coalition/working-groups/wg-towards-transformations-transdisciplinarity-applied-practice-based-research-and-impacts/ viewed 14 June 2024.
- Derrick, G. E.; Samuel, G. S.: All this grassroots, real life knowledge: Comparing perceived with realised concerns of including non-academic evaluators in societal impact assessment. In: I. Ràfols, J. Molas-Gallart, E. Castro-Martínez & R. Woolley (Eds.), 21st International Conference on Science and Technology Indicators STI 2016. Book of Proceedings (Valencia; pp. 379–386). https://doi.org/10.4995/sti2016.2016.4543
- Luo, J.; Ma, L.; Shankar, K.: Does the inclusion of non-academic reviewers make any difference for grant impact panels? Science and Public Policy, 48, 2021, pp. 763–775. https://doi.org/10.1093/scipol/scab046
- Ochsner, Michael: Identifying Research Quality in the Social Sciences. In: Engels, Tim C. E. and Kulczycki, Emanuel (eds.), Handbook on Research Assessment in the Social Sciences, chp. 4, 2022, p. 48–66.
- Oancea, A.; Furlong, J.: Expressions of excellence and the assessment of applied and practice based research. Research Papers in Education, 22:2, 2007, pp. 119–137. https://doi.org/10.1080/02671520701296056
- Veldhuizen, B.; Oostdam, R.; Enthoven, M.; Snoek, M.: Reflective movements in the professional development of teacher educators as supervisors of student research in higher education. European Journal of Teacher Education, 44:4, 2021, pp. 452–467. https://doi.org/10.1080/02619768.2020.1777977
- Shaw, I.; Norton, M.: Kinds and Quality of Social Work Research. The British Journal of Social Work, 38: 5, 2008, pp. 953–970. http://www.jstor.org/stable/23724463 - viewed 20 June 2024.
- Shaw, I.; Lunt, N.: Forms of Practitioner Research. The British Journal of Social Work, 48:1, 2018, pp. 141-157. https://doi.org/10.1093/bjsw/bcx024
- Willemse, T. M.; Boei, F.; Pillen, M.: Fostering Teacher Educators' Professional Development on Practice-Based Research Through Communities of Inquiry. Vocations and Learning 9, 2016, pp. 85–110. https://doi.org/10.1007/s12186-015-9142-3

¹ The "Deutsche Agentur für Transfer und Innovation (DATI)" is a project of the German federal government. A new funding agency for the applied sciences is to be set up. The "DATIpilot" is a forerunner with which the first steps are to be trialled.