AC 8: Responsible Research and Innovation

Rationale

This credit recognizes institutions that support responsible research and innovation (RRI). Higher education institutions can play a leadership role in establishing social responsiveness, sustainability, and ethical acceptability as the new normal in research and innovation. Institutions that empower academics to collaborate and distribute their scholarly writings freely help stimulate learning and innovation and facilitate the translation of this knowledge into public benefits that advance sustainability.

Applicability

Applicable to institutions where research is considered in **academic staff** promotion or tenure decisions as a matter of policy or standard practice.

Points available

A maximum of 7 points are available for this credit.

Criteria

8.1 Published ethical code of conduct for research

An institution earns 1 point when it has a published ethical code of conduct for **research** in document form or on a publicly accessible website.

Measurement

Report on current policies and protocols.

Documentation

Report the following information in the online Reporting Tool.

• Does the institution have a published ethical code of conduct for research? (required)

If Yes, at least one form of evidence (website URL or document) is required:

- Online location of the institution's ethical code of conduct for research. Website URL.
- Copy of the institution's ethical code of conduct for research. Upload.

8.2 Recognition of integrated, community-based, and extra-academic research

An institution earns 3 points when it has published promotion or tenure guidelines or policies that cover all research-producing **academic divisions** and give explicit positive recognition to at least two of the following: A) **integrated research**, B) **community-based research**, and C) research impact or reach outside of academic journals. Partial points are available and earned as outlined in Table I.

Criteric	criterion		Points earned
A.	Institution has published promotion or tenure guidelines or policies that give explicit positive recognition to integrated research.	0.75	
	The promotion/tenure guidelines or policies that recognize integrated research cover all of the institution's research-producing academic divisions.	0.75	
B.	Institution has published promotion or tenure guidelines or policies that give explicit positive recognition to community-based research.	0.75	
	The promotion/tenure guidelines or policies that recognize community-based research cover all of the institution's research-producing academic divisions.	0.75	
C.	Institution has published promotion or tenure guidelines or policies that give explicit positive recognition to research impact or reach outside of academic journals.	0.75	
	The promotion/tenure guidelines or policies that recognize research impact or reach outside of academic journals cover all of the institution's research-producing academic divisions.	0.75	
Fotal points earned \rightarrow			Up to 3

Table I. Points earned for indicator 8.2

Measurement

Report on current guidelines and policies. Guidelines and policies that passively recognize integrated, community-based, and/or extra-academic research (e.g., by not specifically excluding them) do not qualify in the absence of explicit positive recognition.

Guidelines and policies adopted by entities of which the institution is part (e.g., government or university system) qualify as long as the policies apply to and are followed by the institution and its academic divisions. In the absence of institution-wide guidelines or policies, an institution may only claim points for those academic divisions that have adopted their own guidelines or policies.

Documentation

Report the following information in the online Reporting Tool.

• Does the institution have published promotion or tenure guidelines or policies that give explicit positive recognition to integrated research? (required). I.e., interdisciplinary, transdisciplinary, and/or multidisciplinary research.

If Yes, the following two fields are also required:

- Description or text of the promotion/tenure guidelines or policies that explicitly recognize integrated research
- Do the promotion/tenure guidelines or policies that recognize integrated research cover all of the institution's research-producing academic divisions?
- Does the institution have published promotion or tenure guidelines or policies that give explicit positive recognition to community-based research? (required). Alternative terminology may be used, e.g., collaborative inquiry, community-engaged scholarship, feminist participatory research, Indigenous research, or participatory action research.

If Yes, the following two fields are also required:

- Description or text of the promotion/tenure guidelines or policies that explicitly recognize community-based research
- Do the promotion/tenure guidelines or policies that recognize community-based research cover all of the institution's research-producing academic divisions?
- Does the institution have published promotion or tenure guidelines or policies that give explicit positive recognition to research impact or reach outside of academic journals? (required). For example, citations in gray literature, the media, and policy papers.

If Yes, the following two fields are also required:

- Description or text of the promotion/tenure guidelines or policies that explicitly recognize research impact or reach outside of academic journals
- Do the promotion/tenure guidelines or policies that recognize research impact or reach outside of academic journals cover all of the institution's research-producing academic divisions?

If Yes to any of the above, provide at least one form of evidence (website URL or document). If reporting on multiple guidelines or policies, provide the best available example and/or a website that provides an overview of promotion/tenure for academic employees.

- Online location of the institution's promotion/tenure guidelines or policies. Website URL.
- Copy of the institution's promotion/tenure guidelines or policies. Upload.

8.3 Inter-campus collaboration for responsible research and innovation

An institution earns 1 point when it participates in one or more inter-campus research collaboratives or networks that explicitly aim to promote **responsible research and innovation (RRI)**.

Measurement

Report on current activities.

To qualify, a collaborative or network must have an explicit mission to promote responsible research and innovation or else actively address public engagement in research and innovation, the accessibility of scientific results, the take up of gender and ethics in research and innovation content and process, and/or formal and informal science education.

Documentation

Report the following information in the online Reporting Tool.

• Does the institution participate in one or more inter-campus research collaboratives or networks to promote responsible research and innovation? (required)

If Yes, the following field is also required:

 Description of the institution's inter-campus collaborations for responsible research and innovation

8.4 Support for open access publishing

An institution earns 2 points when it facilitates **open access** publishing in at least three of the following ways: A) institutional repository hosting, B) published policies that require open access publishing and cover all research-producing academic divisions, C) an open access article processing charge (APC) fund, and D) **transformative open access agreements**. Partial points are available and earned as outlined in Table II.

Table II. Points earned for indicator 8.4

Criterion		Points available	Points earned
A.	Institution offers institutional repository hosting that makes versions of journal articles, book chapters, and other peer-reviewed scholarly works by its employees freely available on the public internet.	0.67	
B.	Institution has published policies that require its employees to publish scholarly works open access or archive final post-peer reviewed versions of scholarly works in an open access repository.	0.33	

	The open access policies cover all of the institution's research-producing academic divisions .	0.33	
C.	Institution provides an open access article processing charge (APC) fund for employees that includes specified criteria and an application process.	0.67	
D.	Institution negotiates or participates in transformative open access agreements that are consistent with Efficiency and Standards for Article Charges (ESAC) guidelines.	0.67	
Total points earned \rightarrow			Up to 2

Measurement

Report on the current status of the institution's programs.

Policies and programs adopted by entities of which the institution is part (e.g., government or university system) qualify as long as the policies apply to and are followed by the institution.

To qualify, an open access repository may be managed by the institution or the institution may participate in a consortial and/or outsourced open access repository.

Open access policies may allow for publisher embargoes and/or provide a waiver option that allows authors to opt-out of the open access license/program for individual articles. Policies and commitments that are strictly voluntary (i.e., opt-in) do not qualify. Likewise, open access policies published by external funding agencies do not qualify in the absence of a formal institutional policy. In the absence of institution-wide open access policies, an institution may only claim points for those academic divisions that have adopted their own policies.

To qualify, an APC fund must include specified criteria and an application process. Discounts and ad hoc funding for APCs do not qualify in the absence of a formal ongoing program.

Documentation

Report the following information in the online Reporting Tool.

• Does the institution offer repository hosting that makes versions of journal articles, book chapters, and other peer-reviewed scholarly works by its employees freely available on the public internet? (required)

If Yes, the following field is also required:

- Narrative and/or website URL providing an overview of the open access repository
- Does the institution have one or more published policies that require its employees to publish scholarly works open access or archive final post-peer reviewed versions of scholarly works in an open access repository? (required)

If Yes, the following field and at least one form of evidence (policy text, website URL, or document) are also required. If reporting on multiple guidelines or policies, provide the best

available example and/or a website that provides information about open access at the institution.

- Do the open access policies cover all of the institution's research-producing academic divisions?
- Text or online location of the institution's open access policies
- Copy of the institution's open access policies. Upload.
- Does the institution provide an open access article processing charge (APC) fund for employees? (required)

If Yes, the following field is also required:

- Narrative and/or website URL providing an overview of the open access APC fund
- Does the institution negotiate or participate in transformative open access agreements that are consistent with ESAC guidelines? (required). For example, "read and publish" agreements that are transparent, aim to constrain the costs of scholarly communication and foster equity in scholarly publishing, and ensure that authors retain copyright.

If Yes, the following field is also required:

• Narrative and/or website URL providing an overview of the institution's transformative open access agreements with publishers

Glossary

Academic division – An administrative division of a college, university, or school faculty that is devoted to a subset of students (e.g., Undergraduate School) or a particular academic degree program or discipline (e.g., School of Architecture). Divisions may exist under other nomenclature and with coarser or finer divisions, depending upon each institution's context.

Academic staff – Personnel whose primary assignment is instruction, research, or public service. Also known as "faculty members", academic staff include personnel who hold an academic rank with titles such as professor, associate professor, assistant professor, instructor, lecturer, or the equivalent. The category includes personnel with other titles (e.g., dean, director, associate dean, assistant dean, chair, or head of department) if their principal activity is instruction or research. It does not include graduate, instruction, or research assistants; student teachers; or teacher aides. [Adapted from the International Standard Classification of Education (ISCED) and the work of the Organization for Economic Cooperation and Development (OECD).]

Community-based research – An approach to applied community projects in which researchers and community members collaborate as equals in the research process. This approach validates local and Indigenous knowledge and requires, at minimum, that community members define the problems to be addressed and serve in an advisory capacity over the entire project. Community-based research is inclusive of collaborative inquiry, community-engaged scholarship, feminist participatory research, Indigenous research, and participatory action research. [Adapted from the Oxford Research Encyclopedias.]

Efficiency and Standards for Article Charges (ESAC) – An open international community of information professionals dedicated to putting the vision of open access to research into practice, e.g., through negotiation of transformative agreements and central open access publishing agreements with scholarly publishers. Among other initiatives, ESAC publishes <u>guidelines for</u> transformative open access agreements.

Employees – Personnel compensated directly by the institution (unless otherwise specified in credit language). Also known as "staff members" or "direct employees", employees include academic, non-academic, and executive staff and regular/permanent and short-term/casual employees.

Integrated research – Categories of research that address complex problems by involving integrated multiple disciplines. Examples include multidisciplinary, interdisciplinary, and transdisciplinary research.

Open access – Free availability on the public internet, permitting any user to read, download, copy, distribute, print, search, or link to the full texts of peer-reviewed research articles, crawl them for indexing, pass them as data to software, or use them for any other lawful purpose, without financial, legal, or technical barriers other than those inseparable from gaining access to the internet itself. The only constraint on reproduction and distribution, and the only role for copyright in this domain, should be to give authors control over the integrity of their work and the right to be properly acknowledged and cited. [Adapted from the definition used by The Budapest Open Access Initiative.]

Research – The conception or creation of new knowledge. Research may include improving or developing concepts, theories, models, techniques, instrumentation, software, and/or operational methods. [Adapted from the definition used by the United Nations Educational, Scientific and Cultural Organization (UNESCO).]

Responsible research and innovation (RRI) – An approach that anticipates and assesses potential implications and societal expectations with regard to research and innovation, with the aim to foster the design of inclusive and sustainable research and innovation. The five key themes of RRI are gender equality, open access, citizen engagement, science education, and ethics. [Adapted from the work of the European Commission.]

Sustainability challenge – An issue or situation that threatens or undermines ecological integrity, racial equity and social justice, or the ability of future generations to meet their needs (e.g., biodiversity loss, poverty and inequality, and climate change), OR a goal or objective that contributes to the resolution of such an issue or situation (e.g., ecosystem health, universal human rights, and renewable energy generation). To identify sustainability challenges, it may be helpful to reference the targets embedded in the Sustainable Development Goals (SDGs), the principles outlined in the Earth Charter, and/or the Doughnut of social and planetary boundaries.

Sustainability research – Research activities and scholarly work that explicitly address the concept of sustainability, further our understanding of the interdependence of ecological and social/cultural/economic systems, or have a primary and explicit focus on a sustainability challenge.

Transformative open access agreements – Agreements (also known as "read and publish") negotiated between institutions (e.g., libraries, national, and regional consortia) and publishers, in which former subscription expenditures are repurposed to support open access publishing of the negotiating institutions' authors. [Based on the definition used by the Efficiency and Standards for Article Charges (ESAC) Initiative.]