

Research Assessment Exercise 2020
Panel 13 – Education
Panel-specific Guidelines on
Assessment Criteria and Working Methods
(September 2018)

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Introduction

1. This document sets out the assessment criteria and working methods that the Education Panel of the Research Assessment Exercise (RAE) 2020 will apply. It should be read alongside the General Panel Guidelines of the exercise. The provisions set out in this document serve as further elaboration and amplification on the assessment criteria and working methods as applied to the Education Panel. In areas where no additional information has been specified, the provisions in the General Panel Guidelines will prevail and apply in the assessment process of the Panel. These guidelines do not replace or supersede the requirements for submissions that are set out in the Guidance Notes for the RAE 2020.

2. This document describes the criteria and methods for assessing submissions in the Education Panel. It provides guidance on the type of information required in the submissions. It also provides a single, consistent set of criteria that will be applied by the Panel and sub-group(s)/sub-panel(s), if any, when undertaking the assessment having regard to any differences in the nature of discipline or respective unit of assessment (UoA) under purview. It also provides a common approach to the working methods applied within the Panel.

Section A: Submissions

UoAs under the Panel

3. The Education Panel will assess universities' submissions from the following UoAs –

<u>Code</u>	<u>UoAs</u>
40	physical education, sport, recreation & physical activities
41	education (incl. curriculum & instruction, education administration & policy and other education)

4. The Panel expects to receive submissions whose primary research focus falls within the respective remit of the above UoAs. The UoAs under the Panel's remit cover the full spectrum of applied and theoretical work as it relates to the practice of education.

Inter-disciplinary Research

5. The Panel also recognises that individual UoAs do not have firm or rigidly definable boundaries, and that certain aspects of research are naturally inter-disciplinary or multi-disciplinary or span the boundaries between individual UoAs, whether within the Panel or across panels. The Panel will adopt the arrangements for assessing inter-disciplinary submissions as set out in paragraphs 39-40 of the General Panel Guidelines.

6. The discipline of Education is inherently diverse and celebrates its inter-disciplinarity. The UoAs under the Education Panel's remit are likely to draw on, but not be limited to, relationships with sociology, psychology, anthropology, linguistics, computer science, statistics, history, philosophy and economics. Research in the field of Education deploys a wide range of qualitative and quantitative methods with structured, exploratory and participatory research designs.

Assignment of Eligible Academic Staff in Each UoA

7. Pursuant to paragraphs 7-11 of the General Panel Guidelines, the Education Panel does not expect to receive information on sub-discipline(s) in relation to eligible academic staff and respective research outputs.

8. It is critical that research outputs are assessed by the most appropriate panel. If a panel suspects any anomaly regarding universities'

assignment of eligible academic staff (and therefore their outputs) to research area(s) and UoA(s) under its remit, it will follow the procedures for re-assignment of the eligible staff according to paragraphs 10-11 of the General Panel Guidelines. The Panel also recognises its responsibility to handle submissions arising from any re-assignment of eligible academic staff to the Panel. In practice, the Panel would find the assignment of eligible academic staff likely susceptible to anomaly in cases where a member of academic staff in a discipline other than education had made a submission based upon research describing studies that are narrowly focused on curriculum or practices of their parent discipline. They should be judged by education experts in that parent discipline.

University's Research Strategy Statement

9. Following paragraphs 2.16-2.18 and Appendix B of the Guidance Notes and paragraph 15 of the General Panel Guidelines, the Research Strategy Statement submitted by each university will provide contextual information for the Panel when assessing the submissions. These Statements will not be assessed, but may help the Panel to understand better the material that is presented in each submission, particularly insofar as UoAs refer to the overall position of their university. The Statements will also help the University Grants Committee (UGC) when viewing the quality profiles of the universities as a whole upon completion of the RAE 2020.

10. *(Template paragraph deleted)*

Section B: Assessment Criteria: Research Outputs

Output Types

11. The Education Panel will consider the eligibility of research outputs as described in paragraphs 16-18 of the General Panel Guidelines, paragraphs 5.7-5.11 and Appendix F of the Guidance Notes.

12. The Panel will assess the quality of each eligible output on its own merits and not in terms of its publication category, medium or language of publication. The Panel will examine each item in detail and will not assess outputs mechanistically according to the publication venue. The Panel recognises that there can be work of the highest quality in various output forms, and no distinction will be made between types of output submitted

nor whether the output has been made publicly available electronically or in a physical form.

13. Forms of research outputs that are admissible and specifically relevant to the Education Panel include the following examples. These should not be regarded as exhaustive lists. Equally, there is no implication of priority or importance in the ordering of examples in these lists –

The following items are regarded as “traditional” in their academic format:

- books, book chapters and research monographs.
- published papers in scholarly journals.
- published conference papers and reports.
- review articles incorporating new research or insights.

The following items are examples of what may be considered “non-traditional” research outputs in their format:

- new materials, devices, and artefacts relating to educational practice.
- patents awarded or published patent applications.
- software, computer code and algorithms.
- standards documents.
- portfolio of design work, creative arts, or research relating to educational practice.
- documentary film or video.
- technical reports.
- textbooks.
- translations.
- further editions of a published work.

Please note the requirements for an abstract that includes a clear indication of what new insights or innovation are presented in outputs, as at paragraph 18 of the General Panel Guidelines. If the form of an output (e.g., an artefact, software or video) does not, by itself, reveal its research imperatives and associated process of investigation, so as to establish a permanent legacy of that research in the public domain, then it is either a

non-traditional research output or not a research output at all. Universities submitting non-traditional outputs must provide additional information as advised in paragraph 5.17 (d) of the Guidance Notes.

14. Research outputs will be assessed for the quality of original research that they include. Translations are acceptable as a research output if they make an original and distinctive contribution to the work translated. All such formats as those listed above for representing research are acceptable, given that they contain a significant component of previously unpublished research and original insight. Such outputs will be judged for the quality of that research whether or not the research has been subject to peer review. That said, the Panel does recognise that peer review normally entails careful refereeing of papers submitted for publication. However, the Panel is also aware that the claim of peer review invokes practices of scrutiny that can vary greatly in depth, scope and independence.

15. The Panel will consider subsequent editions of previous work only where a new edition serves to elaborate the original work with novel and insightful material.

Double-weighting of Research Outputs

16. Paragraphs 29-31 of the General Panel Guidelines indicate that in exceptional cases a submitting university may request that outputs of extended scale and scope be double-weighted in the assessment. In view of established practice in Educational Studies of publishing major research outputs in the form of scholarly books or monographs, the Panel recognises that there may be submitted outputs of such scale and scope. It will consider the items submitted for double-weighting in line with the General Panel Guidelines.

17. When requesting for double-weighting of an output, universities should submit a statement in not more than 100 words, explaining in what ways the output is of sufficiently extended scale and scope to justify the claim. The Panel will decide whether to double-weight the output on the basis of the scale and originality of its contribution to knowledge. The Panel will consider a substantial authored contribution to be most likely a monograph or book approximately equivalent to requiring research effort for producing at least two single outputs. A substitute output should be submitted to function as a backup for cases where double-weighting is proposed on submission but not considered by the Panel to be appropriate.

Co-authored/Co-produced Outputs

18. The Panel affirms the principles and arrangements on assessing co-authored/co-produced research outputs as set out in paragraphs 32-34 of the General Panel Guidelines.

19. The Panel will consider co-authorship to be a normal element of research activity within the discipline of Educational Studies. The Panel will expect all named co-authors to have made a significant contribution to the research process leading to the output concerned. If a submitted co-authored research output involves more than five authors, the submitting university must provide additional information that clarifies the extent and character of the contribution made by the author with whom the submission is associated as outlined in paragraph 34 of the General Panel Guidelines. This description is limited to 100 words.

Non-traditional Outputs

20. The Panel will handle research outputs in non-traditional form according to paragraphs 35-37 of the General Panel Guidelines. The Panel expects such submissions to be rare and their contribution to be evident. However, if their contribution to knowledge is not easily apparent, the Panel would expect to receive explanatory information about such non-traditional output that identifies its novelty, the method used to ensure academic rigour in the production of the output, deliverables, and dissemination method as advised in paragraph 5.17 (d) of the Guidance Notes. For submissions involving recordings, images or photographs, the Panel would expect the contents are of good quality in at least 16-bit audio and high definition 1280 × 720 video resolution for recordings and 300 dpi (dots per inch) for images/photographs respectively.

Criteria and Quality Levels for Assessing Research Outputs

21. Panel members will use their professional judgement with reference to international standards in assessing research outputs.

22. In assessing outputs, the Panel will look for evidence of originality, significance and rigour, and will grade each output into one of the five categories of quality level as set out in paragraph 19 of the General Panel Guidelines. The generic description of the quality levels as set out in paragraph 20 of the General Panel Guidelines will be applied in the Panel's assessment.

23. The Education Panel provides the following amplifications on the criteria of assessing research outputs –

- **originality:** The Panel will judge the extent to which an output offers new knowledge rather than only summarising or re-formatting what is already known. The Panel will judge how far an output displays a distinctive departure from existing knowledge or practice: engaging with new or complex problems or debates and/or tackling established problems in new ways. The Panel recognises that new knowledge and understanding can come in a variety of forms. It may address new questions, produce new evidence, devise new methods and modes of expression or develop new syntheses of existing work. Moreover, the Panel will consider how adequately and in what manner this novelty is made to align with existing knowledge.
- **significance:** The significance of an output will depend on the interests of the community it serves. The Panel will judge the extent to which an output is agenda-setting: offering insights that advance the intellectual or policy agenda or generate new audiences. The Panel may consider the extent to which the output has promoted the discipline, raised its profile among other disciplines or developed inter-disciplinary initiatives. Significance may also be apparent through the impact or potential impact an output may have on policy or practice, although the Panel recognises that such impact may only be achieved over the longer term. Significance of an output may also be judged in terms of how far it promotes or extends other independently significant research.
- **rigour:** The Panel recognises the need for sensitivity to a plurality of approaches and methods. It will judge the extent to which an output illustrates an appropriate and effective choice of conceptual framework or analytic methods for a given disciplinary problem, applying them with integrity and in a principled manner. Outputs that manifest such rigour will have been undertaken and described in sufficient detail to ensure confidence in the credibility of conclusions. Further, the Panel will judge how far authors have demonstrated a critical and reflective attitude towards their procedures, their arguments and their conclusions.

24. In addition, the Panel provides the following advice on their understanding of the quality definitions adopted for assessing research outputs –

The Panel will take into consideration the following characteristics in particular –

- The significance of the work to advance knowledge, skills, understanding and scholarship in relation to theory, practice, educational management and/or policy.
- The challenge and logistical difficulty posed by the research.
- The logical coherence of argument.
- Its contribution to theory-building.

Metrics/Citation Data

25. Pursuant to paragraph 24 of the General Panel Guidelines, the Panel acknowledges that metrics and citation data may sometimes serve as advisory or secondary information, although they should never be used in any algorithmic or deterministic way for the evaluation of research quality.

26. The Education Panel will examine each output in detail for the assessment. The Panel is aware of the limitations of citation data, in particular their variability within as well as between disciplines, and the need to consider that some excellent work takes time to demonstrate its full achievements. Some panel members might make limited use of metrics where these help initial assessment, but the Panel will not refer to metrics or citation data in making its final judgment on the quality of submitted research outputs.

Additional Information on Research Outputs

27. Other than the information required on research outputs as specified elsewhere in the Guidance Notes, and unless specifically required by the Panel during the assessment process, no other information should be provided, and the Panel will take no account of any such information if submitted.

Section C: Assessment Criteria: Research Impact

Range of Impacts

28. The Education Panel will accept submissions on research impacts that meet the generic definition and criteria as set out in paragraphs 47-48 of the General Panel Guidelines.

29. The Panel will assess the quality of all eligible impact submissions based on their merits on equal footing with no consideration given to the differences among submitting universities/units in terms of staff size, resources and histories. The Panel recognises that impacts within its remit can be manifested in various ways and may occur in a wide range of spheres whether locally, regionally or internationally. In all such cases the Panel believes it is imperative for submissions to trace back claims of impact to particular research findings.

30. Examples are provided to illustrate the range of potential impacts from research across the Education Panel in Table A. These examples are indicative only, and are not exhaustive or exclusive. Equally, there is no implication of priority or importance in the ordering of examples in the list.

31. Universities are expected to submit their strongest impact case(s) and not to align submitted cases specifically with the particular types of impact listed, as an impact case may describe more than one type of impact. For example, a new research centre can influence both educational policy and classroom practice, a new technical development can have economic impacts as well as impacts on learning, a new dissemination programme can influence public understanding as well as curriculum design.

Table A: Examples of Impact

Impact on practitioners	Published research findings suggest that some educational practice is likely to have a beneficial impact on learners. A practitioner support network was therefore created, and the research team has worked with the network to undertake continuing professional development (CPD) and produce materials for wider dissemination. N practitioners have attended CPD, and the practice is now part of the CPD curriculum.
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Impact on communities	Published research findings suggest a particular kind of community learning centre can promote positive benefits to learners and communities. A systematic scaling up was therefore implemented by the government, so that more community learning centres have been established and funded. More young people have been recruited onto self-study programmes and free on-line courses have been created centred on local concerns.
Impact on technical resources	An on-line CPD intervention was developed as part of a design-based research study. This was then scaled up and rolled out through a spin-out company. N teachers have signed up for the CPD intervention, and evaluation evidence suggests that it has impacted on their practice in various (named) ways.
Impact on families	Research findings suggesting a particular approach to improving the engagement of whole families in difficult-to-reach communities were published. These findings were picked up by a regional government outside of Hong Kong, who used them to implement an approach to engagement with families from difficult-to-reach communities in the region. N schools were involved in the project, reaching Y families.
Impact on education policy	As a consequence of a study on the effective use of funding by school Principals, the government changed regulations to give Principals more autonomy in some areas of budgeting, but reducing their autonomy in others.

(Note: Other examples of research impact as assessed in other jurisdictions may be accessible online such as <<http://results.ref.ac.uk/Results/SelectUoa>> from the United Kingdom.)

Impact Overview Statement

32. Following paragraphs 7.7 (a) and (b), 7.8 and Appendix G of the Guidance Notes and also paragraph 49 of the General Panel Guidelines, submitting units are required to describe how they have sought to enable and/or facilitate achievement of impact arising from their research during the assessment period, and how they are developing and adapting their

plans to ensure that they continue to do so. This is distinct from the environment overview statement, which should describe how the units support the conduct and production of research.

33. The impact overview statement should include relevant illustrative explanations with examples and traceable references where possible, rather than broad, general statements. The Panel expects the impact overview statement to include –

- **context:** main non-academic user groups, beneficiaries or audiences for the unit's research; main types of impacts specifically relevant to the unit's research, and how these relate to the range of research activities or research groups in the unit.
- **approach to impact:** the unit's approach to interacting with non-academic users, independent advisors, beneficiaries, or audiences; its approach and mechanism to support the achievement of impacts from its research; this could include but is not limited to indicators such as participation in knowledge exchange schemes; professional training provided or consultancy undertaken.
- **strategy and plans:** how the unit is developing a strategy for achieving impact including its goals and plans for supporting and enabling impact from its current and future research.
- **relationship to the case studies:** how the selected case studies relate to the submitting unit's approach to achieving impact; how particular case studies exemplify aspects of the unit's approach or informed the development of the unit's approach; moreover, the Panel recognises that impact case studies are underpinned by research over a period longer than the assessment period, and that individual case studies may not directly relate to or necessarily arise from the unit's current approach.

Impact Case Study(ies)

34. Following paragraphs 7.7 (c) and (d), 7.9-7.10 and Appendix of the Guidance Notes and also paragraph 51 of the General Panel Guidelines, submitting units are required to provide a narrative account in each case study that should be coherent, clearly explaining the relationship between the research and impact, and the nature of the changes or benefits arising.

35. Each impact case study should include appropriate evidence and indicators that support the claims for the impact achieved, including who and what has/have benefitted. Individual case studies may draw on various evidence and indicators, which may take different forms depending on the type of impact.

36. Examples are provided in Table B to illustrate potential evidence or indicators that may be mostly relevant to the Education Panel. These examples are not intended to be exhaustive. Equally, there is no implication of priority or importance in the ordering of examples in the list. The imperative for indicators is that they provide strong evidence that significant change has been achieved within the setting of the case.

Table B: Examples of Evidence or Indicators for Impact

Quantitative indicators	<ul style="list-style-type: none"> • Financial data relating to cost effectiveness. • Performance measures (e.g., examination results, recruitment statistics). • Attendance statistics. • Survey measurements of attitude or opinion.
Documentary evidence	<ul style="list-style-type: none"> • Recorded changes to public policy, legislation, regulations or guidelines. • New codes of professional activities. • Pamphlets, brochures and other publications disseminating activity.
Engagements	<ul style="list-style-type: none"> • Uptake of new methods, tools or materials by institutions or practitioners. • Incorporation of products into best practice or training materials. • Evidence of public discussion and reference in policy arena.
Independent testimony	<ul style="list-style-type: none"> • Stakeholder acknowledgement of effective actions or supportive materials by relevant stakeholders. • Published approval of impact by independent commentators. • Formal acknowledgement of impact by relevant institutions or practitioners.

Reviews and citations	<ul style="list-style-type: none"> • Citations in the academic or professional literature. • Reference in social media. • Invited presentations on broadcast media.
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(Note: Other examples of evidence or indicators for research impact in other jurisdictions may be accessible online such as <<http://results.ref.ac.uk/Results/SelectUoa>> from the United Kingdom.)

37. The Panel provides the following advice on particular aspects of impact case studies –

- Case study impact may occur in a wide range of spheres: creativity, culture, economy, policy, organisations, practitioners, professional services etc. These categories may overlap and so should not be restrictive: case studies may describe impacts in more than one sphere.
- Impact may be local, regional or international and beneficiaries may be various. The Panel will treat all spheres of impact and any beneficiaries identified on an equal basis.
- The unit submitting a case study must itself have conducted research that underpins the claimed impact. The significance of underpinning research from other institutions should be acknowledged.
- The chain of evidence that links underpinning research within the submitting unit to the impacts claimed for a case study must be traced and made clear. It is understood that the form for such evidence may be varied: no type of evidence is inherently preferred.
- The quality of underpinning research for impact is a threshold judgement (a level is met that is adequate to the case): judgement of the case study does not involve judgement of research quality beyond that threshold. The Panel does not routinely expect to review underpinning research output(s): the submitting unit should provide its own evidence of threshold quality, such as that obtained from peer review or citations.
- Submissions should include only those outputs that best illustrate the quality of underpinning research: the submission should not therefore be comprehensive.

- Case studies may achieve impact through public engagement. Evidence of reach and secondary reach should be thorough and may be wide-ranging.
- Key claims made as evidence for research-led impact in the submitted narratives will be judged by the Panel for integrity, clarity and coherence.
- Evidence cited for impact of a case study should be, as far as possible, independently verifiable. The status of those giving testimony on impact should be made clear in terms of whether they are a participants or a reporter of what is claimed.
- Submitted impact initiatives may be at various stages of maturity but they should be sufficiently developed to furnish some verifiable evidence of change or benefit beyond academia having taken place within the assessment period.
- The submitting unit need not have undertaken all of the underpinning research or have been exclusively involved in exploiting.
- Dissemination activity without evidence of its benefit will not be considered impact.

Underpinning Research

38. The Panel acknowledges the level of quality required for research underpinning impact cases, i.e. equivalent to at least 2 star (2*) or international standing, as stipulated in the General Panel Guidelines. Impact case studies should include appropriate evidence or indicators of the quality of underpinning research. Where necessary, the Panel may review the outputs concerned in order to ensure the quality of the research is of at least 2 star (2*).

39. Provided that the Panel is satisfied that the quality threshold has been met, the quality of the underpinning research will not be taken into account in the assessment of the quality of impact. Underpinning research referenced in a case study may also be submitted for assessment under the research output element. The evaluation of the outputs concerned under the impact element is a separate assessment only for assuring the threshold of underpinning research. In this case, the guidance on output types and criteria for assessing research outputs as stipulated in paragraphs 11-15, 21-24 above would apply.

Criteria and Quality Levels for Assessing Research Impact

40. Panels will exercise their expert judgement in assessing the quality of each impact submission, and will not judge in terms of the type of research underpinning the impact cases.

41. In assessing impacts, the Panel will look for evidence of reach and significance, and will grade each impact submission as a whole and give a rating using one or more of the five categories of quality level following paragraphs 54-56 of the General Panel Guidelines. In respect of the Education Panel, the criteria of reach and significance will be understood as follows –

- **reach:** the extent and diversity of the communities, individuals, and organisations that have benefitted or been positively affected from the impact with particular concern for the extent of impact in identified communities of need. For example, the Panel will evaluate the extent to which society as a whole, or targeted communities or individuals have benefitted from the introduction of a new form of educational assessment.
- **significance:** the degree of beneficial effects to policies, practices, perspectives or awareness of organisations, communities or individuals, constructive change to the quality or cost of educational practice. For example, the Panel will evaluate the degree of constructive change to student achievement associated with the adoption of some new technology for learning.

42. The Panel will make an overall judgement about the reach and significance of impacts, rather than assessing each criterion separately. The criteria will be applied in the assessment of the research impact regardless of the domain to which the impact relates.

Section D: Assessment Criteria: Research Environment

Research Environment

43. The Education Panel will accept submissions on research environment according to paragraphs 57-58 of the General Panel Guidelines. The Panel recognises that excellent research can be undertaken in a wide variety of research structures and environments. The Panel has

no pre-formed view of the ideal size or organisational structure for a research environment. The Panel will assess each submission based on what has been presented in relation to the work of the submitting unit in providing and ensuring a good environment.

44. As a research environment submission may relate to a single coherent faculty and equally to multiple departments, submissions may depict the commonalities and dynamics among faculties and departments within the submitting unit, and define their prime activities, how they operate and their main achievements.

Environment Overview Statement

45. Following paragraphs 9.6 (a) and (b), 9.7 and Appendix I of the Guidance Notes, and also paragraph 59 of the General Panel Guidelines, submitting units are required to describe how they have supported the conduct and production of research. This is distinct from the impact overview statement, which should describe how the units encourage and facilitate the achievement of research impact.

46. Within the terms of the Guidance Notes, the Education Panel will expect in particular to see consideration given to the following in the environment overview statement –

- **overview:** submission in this part is expected to briefly describe the organisation and structure of the unit, identifying which research groups are covered in the submission and how research is structured across the submitting unit.
- **research strategy:** evidence of the achievement of declared strategic aims for research during the assessment period, and details of future strategic aims and goals for research; how these relate to the structure described in the overview; and how they will be taken forward; methods for monitoring attainment of targets; new and developing initiatives not yet producing visible outcomes but of strategic importance; identification of priority developmental areas for the unit, including research topics, funding streams, postgraduate research activity, facilities, staffing, resourcing, administration and management.
- **people:** members manifest commitment to a critical but shared ethos of social relations, participation, open communication, ethical values and high standards that together define a

distinct research family; information on staffing policy and evidence of its effectiveness; how individuals at the beginning of their research careers are being supported, mentored, and integrated into the research culture of the submitting unit; information on postgraduate and staff recruitment, training and support mechanisms; mechanisms by which standards of research quality and integrity are monitored and maintained, for example ethics procedures, dissemination practices, and authorship policies; diversity and equality concerns governing the working and academic environment; a collegial environment of mutual support; a culture of transparent decision making.

- **income:** information on research funding portfolio; evidence of successful generation of research income; major and prestigious grant awards made by external bodies on a competitive basis.
- **infrastructure and facilities:** provision and operation of research infrastructure and facilities, including special equipment, library, technical support, space and facilities for research groups and research students; information on joint-university or cross-institution shared or collaborative use of research infrastructure.
- **collaborations:** information on support for and exemplars of research collaborations; mechanisms to promote collaborative research at local and international level; support for interdisciplinary research collaborations; research collaboration with research users; opportunities for travel and attendance at international meetings; access to seed funding.
- **esteem:** prestigious/competitive research fellowships held by individual researchers; external prizes and awards in recognition of research achievement; evidence of significant contributions or individual roles supporting the wider professional community.
- **contribution to the discipline or research base:** exemplars of leadership in the academic community such as advisory board membership; participation in the peer-review process for grants committees or editorial boards.

Environment Data

47. Following paragraphs 9.6 (c) and (d), 9.8 and Appendix J of the Guidance Notes, and also paragraph 60 of the General Panel Guidelines, submitting units are required to provide environment data in conjunction with the environment overview statement. The Panel will consider the environment data within the context of the information provided in the environment overview statement, and within the context of the disciplines concerned. Any supporting statistics should be fully explained: in particular, the Panel recognises the risk of metrics being misleading if not presented in the context of the institution's overarching research strategy.

48. Data on "staff employed by the university proper" and "graduates of research postgraduate programmes" will be used to inform the Panel's assessment in relation to "people" (section (3) (i) and (ii)). Data on "ongoing research grants/contracts" will be used to inform the Panel's assessment on "income" (section (4)). Additional quantitative data or indicators that are particularly relevant to the Panel are indicated in paragraph 46 above. Such additional information should be submitted within the appropriate section(s) of the environment overview statement.

Criteria and Quality Levels for Assessing Research Environment

49. Panels will exercise their expert judgement in assessing the merits of each environment submission, and will not judge automatically in terms of the scale of research environment concerned.

50. In assessing environment, the Panel will consider research environment in terms of vitality and sustainability, including its contribution to the vitality and sustainability of the wider discipline or research base. The Panel will grade each environment submission as a whole with a profile rating using one or more of five categories of quality level as set out in paragraphs 62-64 of the General Panel Guidelines. There is no weighting attached to individual aspects in the assessment.

51. The Education Panel provides the following amplifications to supplement the generic criteria for assessing research environment –

- **vitality:** the extent to which a unit provides an encouraging and facilitating environment for research, has an effective strategic plan, is engaged with the regional and international research community, disseminates its activities widely, comprises a staff mix associated with high performance, is

able to identify, attract and retain excellent postgraduate and postdoctoral researchers through a worldwide reputation, encouraging members to initiate meaningful collaborations organically and not by top-down imposition.

- **sustainability:** vision for the future and investment in people and infrastructure and, where appropriate for the subject area, the extent to which activity is supported by a diverse portfolio of research funding; leadership from individuals who have earned “accountable autonomy” within their education institution; an orientation to the opportunities of cross-disciplinary research.

52. The Panel will make an overall judgement about the vitality and sustainability of research environments.

Section E : Working Methods

Use of Sub-Group(s)/Sub-Panel(s)

53. To facilitate assessment on particular UoAs and/or research areas(s) under the Education Panel, the following sub-groups will be formed to assess submissions in respective research areas –

- Curriculum
- Teaching and learning
- Educational policy and administration
- Other education

Allocation of Work in the Assessment Process

54. The Convenor, consulting the Deputy Convenor and other panel members, as appropriate, will allocate work to members and, if necessary, impact assessors and/or external reviewers in light of their expertise and workload. In allocating the work, the Convenor will also take into account any potential conflicts of interest of respective panel members. All panel members and assessors will take account of the requirements of the General Panel Guidelines to ensure that the exercise is conducted fairly and equitably.

55. Panel members will examine the submitted outputs in detail, and put forward a recommendation to the Panel for a collective decision on the final grading. To ensure fairness and consistency, each research output will be assessed in detail by at least two members, at least one of whom should be a non-local member to the extent possible. For UoA(s) which is(are) only housed at one or two local universities, submissions will be assigned to at least one non-local member in order to ensure fair and impartial assessment. Final grading on research outputs will be decided by the Panel as a whole.

56. Subject to conflicts of interest of individual members, the impact and environment submissions will be assessed by members of the whole Panel and the final grading of individual submissions will be a collective decision of the Panel.

Cross-Panel Referrals

57. This Panel will follow the procedures in paragraphs 41-43 of the General Panel Guidelines when initiating referrals to other panels and assessing submissions cross-referred by another panel.

58. Generally, research on pedagogy and education issues submitted to other panels will be assessed by panel members of the respective panels or external reviewers with expertise in pedagogy. In the case that the expertise of members of this Panel is called for, this Panel may also assess research on pedagogy and education issues cross-referred from other panels.

59. The need for cross-panel referrals will be judged when the composition of the Education Panel is finalised. It is envisaged such referrals might be necessary in areas such as: neuroscience and medicine (Panel 1 – Biology or Panel 2 – Health Sciences) and Chinese language (Panel 11 – Humanities).

External Advice

60. This Panel will follow the procedure in paragraph 66 of the General Panel Guidelines when referral to external reviewers for expert advice becomes necessary for panel assessment. External reviews may be sought in the cases for which members of the Panel do not have the necessary expertise such as outputs in foreign language or niche research work.

Trial Assessment

61. With reference to paragraphs 89-91 of the General Panel Guidelines, the Panel will conduct a trial assessment selected from universities' submissions to the Panel that represents the anticipated range of submissions for outputs, impact and environment. These sample submissions will be assessed by all members of the Panel. Members will share among themselves any important observations in the assessment to ensure fairness and consistency in the actual assessment. Preliminary assessment will be in terms of ranking. Discussion of these will prepare for a consideration of their status in terms of ratings and the interpretation of judgement criteria. Submissions used for the trial assessment will be assessed afresh during the main assessment period regardless of their assessment results during the trial. The Panel will decide on the sample size after the submissions are received.

Panel Feedback Report

62. With reference to paragraph 71 and Appendices E and F of the General Panel Guidelines, the Panel will provide feedback to the UGC after the assessment process. Non-local panel members will be involved in offering comments for an impressionistic international comparison. The Convenor on behalf of the whole panel will submit the panel feedback report to the UGC by 10 November 2020.