Panel criteria and working methods

Panel K

UOA 44  Psychology
UOA 45  Education
UOA 46  Sports-Related Studies

January 2006
Ref RAE 01/2006 (K)
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RAE 2008 Assessment criteria and working methods: Main Panel K and UOAs 44-46

To Heads of HEFCE-funded higher education institutions
Heads of HEFCW-funded higher education institutions
Heads of SFC-funded higher education institutions
Heads of universities in Northern Ireland

Of interest to those responsible for Research assessment, Research policy, Planning

Reference RAE 01/2006 (K)
Publication date January 2006
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Executive summary

Purpose
1. This document describes the criteria and working methods of the following main panel and unit of assessment (UOA) sub-panels in the 2008 Research Assessment Exercise (RAE2008):
   • Main Panel K
   • UOA 44 Psychology
   • UOA 45 Education
   • UOA 46 Sports-Related Studies

Key points
2. These statements of criteria and working methods have been revised and finalised following a public consultation on earlier draft versions which we conducted over summer 2005. They take account of views expressed through the consultation by higher education institutions and their staff, subject associations and other stakeholder bodies.

3. The main and sub-panel statements of criteria and working methods should be read alongside both the generic statement in Section 2 and the guidance on data requirements for the 2008 RAE (RAE 03/2005 ‘Guidance on submissions’).

Action required
4. This document is for information and guidance. No action is required.
Section 1: Introduction

5. Panels met to draft criteria and working methods in spring 2005. The UK higher education (HE) funding bodies invited comments on these drafts via a web-based consultation in summer 2005. The focus of the consultation was on aspects of the panels’ criteria and working methods that the panels themselves could change, rather than on matters that had been fixed and published in other documents about the 2008 RAE (for example RAE 01/2004 ‘Initial decisions by the UK funding bodies’, and RAE 01/2005 ‘Guidance to panels’).

6. In autumn 2005, panels met to consider responses to the consultation and to finalise their criteria. A quantitative analysis of responses to the consultation and a summary of the generic issues that respondents raised is available on the RAE web-site at www.rae.ac.uk/pubs/

7. The purpose of publishing statements of criteria and working methods is to give higher education institutions (HEIs) information about how submissions will be assessed, in good time to assist with their planning. As with previous RAEs, the assessment process is based on expert review: each panel will use its professional judgement to form a view about the overall quality of the research activity described in each submission, taking account of all the evidence presented, against its published criteria and in line with its published working methods. Results for each submission will be published in the form of a quality profile, which is described in Annex 1.

8. Section 2 of this document contains a generic statement on the criteria and working methods (hereafter referred to as ‘the generic statement’) that all panels will adopt. Section 3 contains the specific criteria and working methods of one main panel and the sub-panels for the units of assessment (UOAs) that it covers. Main and sub-panel criteria and working methods must be read alongside the generic statement in Section 2.

9. Panels’ criteria and working methods should be read in conjunction with the guidance to HEIs on the data requirements for the 2008 RAE (see RAE 03/2005 ‘Guidance on submissions’). The latter explains the purpose of the RAE and the principles underpinning it, the role of main and sub-panels, and the data they will use to make assessments, and gives other details on the context in which the panels’ criteria and working methods may be understood.

10. In this document, ‘panels’ is used to mean both main panels and sub-panels. Where we refer exclusively to main panels or to sub-panels, we identify them as such.

Enquiries

11. Enquiries should be addressed to the RAE team (info@rae.ac.uk or tel 0117 931 7267) and should be routed wherever possible through each HEI’s designated RAE contact.
Definitions

12. For the purposes of the RAE, and throughout the panels’ criteria and working methods, the following definitions apply:

a. **Assessment period** means the period from 1 January 2001 to 31 July 2007. The research described in submissions, including data about research students and research income and the textual commentary, must relate to this period.

b. **Census date** means the date determining the affiliation of research-active staff to a particular institution. Staff may be submitted in the RAE by the institution that employs them on this date (or, in the case of Category C staff, by the institution that is the focus of their research), regardless of previous or forthcoming changes in their employment status. The census date is 31 October 2007.

c. **Department** means the staff included in a submission to one of the 67 UOAs recognised by the RAE, and, by extension, their work and the structures which support it. RAE departments are often not identified with a single administrative unit within an HEI, or in the case of joint submissions, across HEIs.

d. **Early career researchers.** These are individuals of any age who first entered the academic profession on employment terms that qualified them for submission to RAE2008 as Category A staff on or after 1 August 2003.

e. **FTE** means full-time equivalent:
   
   i. For staff, it refers to the extent of a member of staff’s contracted duties as compared to those of a typical full-time member of staff in the same category. The length of time in the year for which the individual was employed and the relative proportion of total contracted time spent on research are irrelevant in reporting staff FTEs. The minimum contracted FTE that may be reported for Category A staff is 0.2.

   ii. For students, it refers to the amount of study undertaken in the year of programme of study, compared to a full-time student with the same qualification aim studying for a full year. FTEs should be expressed to two decimal places, as for example 0.67.

f. **Publication period** means the period during which research outputs must be placed in the public domain (or in the case of confidential outputs, lodged with the sponsor) if they are to qualify for assessment in RAE2008. The publication period runs from 1 January 2001 to 31 December 2007 for all UOAs.

g. **Returned** refers to any data included in any of the RAE submission forms RA0 to RA5c.

h. **Selected staff** refers to the named staff included in RAE submissions by HEIs, in accordance with their own internal code of practice on preparing submissions and selecting staff for inclusion. Other staff may be eligible for inclusion (that is, they may satisfy the data definitions and requirements), but HEIs are not required to include all their eligible staff. Further information, and guidance from the Equality Challenge Unit on preparing a code of practice, is given in Annex G of RAE 03/2005 ‘Guidance on submissions’.

i. **Submission** means a complete set of forms RA0 to RA5c returned by an HEI in any of the 67 UOAs.

j. **UOA** means one of the 67 subject units of assessment defined for the 2008 RAE, which are listed in Annex 2.

13. The definition of research for the 2008 RAE is at Annex 3. Research outputs and research income may be included in submissions, provided that the work they embody or fund meets this definition. Consultancy income and research outputs arising from consultancy contracts should normally be excluded, since consultancy is usually concerned with applying existing knowledge. However, they may be included if the work undertaken or published as a result meets the
RAE definition of research, irrespective of the nature of the contract or invoicing arrangement.

**Content of submissions**

14. Each submission will contain the core data detailed in sub-paragraphs 14a to 14i below. (The RA code in brackets refers to the research assessment form through which the data will be collected.) For detailed definitions of the data required in each RA form, see RAE 03/2005 ‘Guidance on submissions’.

   a. Overall staff summary (RA0): summary information on research-active staff selected (FTE and headcount) and related academic support staff (FTE) in the unit of assessment. The data collection software will populate some of RA0 using the data that HEIs enter in RA1.

   b. Research-active individuals (RA1): detailed information on individuals selected by the institution for inclusion as research active.

   c. Research output (RA2): up to four items (or fewer if designated for particular reasons in UOA criteria) of research output produced during the publication period (1 January 2001 to 31 December 2007) by each individual named as research active and in post on the census date (31 October 2007).

   d. Research students (RA3a): numbers of full-time and part-time postgraduate research students and degrees awarded.

   e. Research studentships (RA3b): numbers of postgraduate research studentships and the source of funding for them.

   f. External research income (RA4): amounts and sources of external funding.

   g. Textual description (RA5a): including information about the research environment and indicators of esteem.

   h. Individual staff circumstances (RA5b).

   i. Category C staff circumstances (RA5c).

15. In line with recommendations from the Roberts’ Review of research assessment, some panels request that HEIs detail in RA5a further specific, quantitative information that will contribute to the assessment of the research environment. Such additional information requirements are specified in the relevant panels’ criteria statements.

16. The word limits for RA5a, RA5b and RA5c are given in Annex 6.

**Categories of research-active individual**

17. The definitions of staff Categories A to D are:

   a. **Category A.** Academic staff in post and on the payroll of the submitting institution on the census date. Eligible Category A academic staff must be employed under a contract of employment with the HEI on the census date. Their contract must list research and/or teaching as their primary function.

   b. **Category B.** Academic staff who held a contract with the institution after 1 January 2001 and who left the institution (or transferred into a department returned to a different UOA) after that date and before the census date, and who otherwise would have been eligible for inclusion as Category A.

   c. **Category C.** Independent investigators active in research who do not meet the definition for Category A staff, but whose research on the census date is clearly and demonstrably focused in the department that returns them.

   d. **Category D.** Independent investigators who met the definition for Category C staff during the period 1 January 2001 to 31 October 2007 but not on the census date.

For detailed definitions, please refer to Part 3, Section 1 of RAE 03/2005 ‘Guidance on submissions’.

**Unit of assessment description**

18. Each of the sub-panels’ criteria statements contains a description of the UOA and of its boundaries with other UOAs. The description indicates the main areas covered by the UOA and is not intended to give an exhaustive account of the sub-disciplinary coverage. HEIs should refer
to the UOA descriptions when deciding in which UOAs to make submissions.

Assessment process

19. This is an expert review exercise. Sub-panel members will exercise their knowledge, judgement and expertise to reach a collective view on the quality profile of research described in each submission, that is the proportion of work in each submission that is judged to reach each of five quality levels from 4* to Unclassified (see Annex 1). The definition of each level relies on a conception of quality (world-leading) which is the absolute standard of quality in each UOA. Each submission will be assessed against absolute standards and will not be ranked against other submissions.

20. The five quality levels from 4* to Unclassified apply to all UOAs. Some panel criteria statements include a descriptive account of the quality level definitions, to inform their subject communities on how they will apply each level in judging quality. These descriptive accounts should be read alongside, but do not replace, the standard definitions.

21. In reaching a view on quality profiles, sub-panels will take account of all components of a submission: research output, research students and studentships, research income, and research environment and esteem indicators. An underpinning principle is that sub-panels should assess each submission in the round: they will not make collective judgements about the contributions of individual researchers, but about a range of indicators relating to the unit, research group or department that is put forward for assessment.

22. Each sub-panel will recommend provisional quality profiles for debate and endorsement by its main panel. Sub-panels must be able to demonstrate in all cases how their quality judgements relate to all the evidence before them and to their published criteria. The quality profile they recommend for any submission must reflect the sub-panel’s expert and informed view of the characteristics of that submission as a whole.

23. In all cases, submissions will be assessed against the criteria for the UOA in which the submission was originally made. Responsibility for recommending a quality profile lies with the sub-panel for that UOA, regardless of whether the sub-panel sought advice on aspects of the submission from specialist advisers or other sub-panels (see paragraphs 52-55 below).

24. Although they reflect a common framework, the assessment criteria and working methods of each main panel and each sub-panel differ in varying degrees across the different UOAs. However, in general, sub-panels grouped under the same main panel have developed criteria that reflect broadly similar approaches to research. Aspects of significant variation, for example where research approaches vary substantially between subjects, are described in the relevant main panel criteria statement.

Joint submissions

25. Joint submissions to one UOA by two or more UK HEIs, of research they have developed or undertaken collaboratively, are encouraged where this is the most appropriate way of describing the research. For further details on joint submissions, please refer to paragraphs 52-56 of RAE 03/2005 ‘Guidance on submissions’. Panels will receive joint submissions as a unified entity, and will assess them in the same way as submissions from single institutions.

Research outputs

26. Submissions should list up to four items of research output by each submitted researcher, but there is no automatic disadvantage in failing to cite four items. Sub-panels will look at each case. The criteria statements offer further guidance on their respective approaches in cases where fewer than four items are listed. Staff citing no research outputs would not usually be considered as research active and should not be submitted to the exercise.

27. HEIs are allowed to list the maximum of four outputs against any researcher, irrespective of their status or the length of time they have had to conduct research. So, for example, four outputs
may be listed against part-time researchers or against individuals whose time for research has been constrained by their ill health – even if the panel’s criteria indicate that the panel would not necessarily expect to see four items listed.

28. We have deliberately defined research output broadly: any form of publicly available, assessable output embodying research as defined for the RAE may be submitted, as may confidential outputs that are not publicly available. Where an output is published as a single coherent work it should be submitted as such and not subdivided for submission as two or more separate items.

29. Where a cited research output includes significant material that was previously published separately (for example, an article reissued as a chapter in a book):
   a. If both outputs were published within the publication period and both are cited, the panel may judge that these should be treated as a single output.
   b. If the earlier output was first published outside the publication period, the panel may take the view that not all of the work reported in the later output should be considered as having been issued within the publication period.
   c. In either of the above cases, the publication history should be appropriately noted in the ‘Other relevant details’ field in RA2, explaining where necessary how far any work published earlier may have been revised to incorporate new findings.

30. In the case of confidential outputs, HEIs must have the prior permission of the person(s) or organisation(s) to whom the work is confidential for the output to be made available for assessment (see paragraph 33).

31. Panels’ criteria for judging the quality of research outputs are intended to be sufficiently broad to enable them to recognise high quality research outcomes in all forms of research – whether basic, strategic, applied, practice-based or interdisciplinary. In addition to printed academic work, research outputs may include, but are not limited to: new materials, devices, images, products and buildings; intellectual property, whether in patents or other forms; performances, exhibits or events; work published in non-print media. Each sub-panel’s criteria statement gives further guidance. In some cases, sub-panels may ask for brief supplementary material describing the research content and significance of certain works, particularly where research outputs do not exist in a conventional form.

32. Panels’ criteria statements reflect an underpinning principle of the RAE that all forms of research output will be assessed on a fair and equal basis. Sub-panels will neither rank outputs, nor regard any particular form of output as of greater or lesser quality than another per se. Some panels may specify in their criteria that where they do not examine an output in detail, they may use, as one measure of quality, evidence that the output has already been reviewed or refereed by experts (who may include users of the research), and has been judged to embody research of high quality. No panel will use journal impact factors as a proxy measure for assessing quality.

33. So that panels can take full account of research that is of relevance to non-academic users, including industry and public bodies, the RAE team has made provision for confidential research outputs that are not publicly available to be submitted for assessment. These could include commercially sensitive research reports for companies, and reports for government departments or agencies which are not in the public domain. Where a confidential output is listed in a submission, the HEI will be responsible for securing permission from the sponsor, and making the output available on request for panels to examine. Please refer to paragraph 98 of RAE 03/2005 ‘Guidance on submissions’ for further information.

Minimum proportions of work examined in detail

34. It is not expected that sub-panels will examine in detail all the research outputs cited. Each sub-panel must, however, examine in detail
a proportion which, in its opinion, is sufficient to make an informed judgement on the quality profile of the work presented. Sub-panels indicate in their criteria statements how they will decide what work to examine in detail, and their approach to assessing work that is not examined in detail.

35. Each sub-panel indicates the minimum proportion of research outputs which it will examine in detail. This is a collective responsibility, not a requirement for each sub-panel member. The phrase ‘examine in detail’ indicates reading in full, reading substantially from or sufficiently to make an informed assessment, or (for outputs which by their nature cannot be read) an equivalent level of scrutiny. Sub-panel members are not required to re-examine work which they have already examined in detail outside the RAE process as part of their normal academic work. They may include such work in the minimum proportion that they report as having examined in detail. Where ‘virtually all’ is the phrase used to describe the proportion to be examined in detail, this means 90% or more. Where a sub-panel indicates that it intends to examine in detail all the submitted outputs, the only constraints on fulfilling this intention would be those outside the sub-panel’s control, for example, if a fire were to destroy, before the sub-panel was able to assess it, an original artefact listed as an output.

36. Where a sub-panel does not examine a research output in detail, it may use information contained in RA2 in assessing it. Therefore, it is essential that HEIs adhere strictly to the specification that some sub-panels have supplied in their criteria statement for the field in RA2 entitled ‘Other relevant details’.

37. For research outputs produced in languages other than English or Welsh, a 300 word abstract in English is required describing the content and nature of the work. A separate field for each output in RA2 will be available for this. Panels will use this abstract to identify appropriate specialist advisers to whom the work may be referred. The abstracts themselves will not form the basis for assessment. This requirement is waived for outputs submitted in any of UOAs 51 to 57 if the output is produced in any of the languages in the remit of that UOA.

**Staffing issues**

38. HEIs are invited to use RA5b to describe, confidentially, any circumstances of individual staff that have significantly adversely affected their contribution to the submission. Main and sub-panels’ statements describe how they will apply their criteria in assessing the contribution of such staff to submissions. HEIs need not describe circumstances (for example, a disability) that have had no adverse effect on an individual’s capacity to undertake research, as reflected by their contribution to the submission.

39. Panels will consider the following individual circumstances to the extent that they are stated to have had a material impact on the individual’s ability to produce the expected volume of research outputs in the assessment period:

a. Family and domestic matters, including:
   i. Absence on maternity, paternity, parental or adoption leave and arrangements on return to work following these periods of leave.
   ii. Part-time working or other flexible working arrangements.
   iii. Time spent acting as a carer or other domestic commitments.

b. Disability, ill-health and injury, including:
   i. Any disability to which the Disability Discrimination Act 1995 applies, including both permanent disabilities and any temporary disability with a duration of 12 months or more.
   ii. Absence from work on the advice of a registered medical practitioner.

c. Engagement on long-term projects of significant scale and scope.

d. Status as an early career researcher. These are individuals of any age who first entered the academic profession on employment terms that qualified them for submission to
RAE2008 as Category A staff on or after 1 August 2003.

e. Prolonged absences (absences for more than six months consecutively in the assessment period) which were agreed by the individual with the institution but which do not fall into one of the categories above. They include:

i. Secondment to non-academic positions outside the higher education sector.

ii. Career breaks for purposes unconnected with research, teaching or other academic duties.

f. Other absences which the institution is legally obliged to permit, such as absences for religious observance or absence arising out of involvement as a representative of the workforce.

g. Any other personal circumstances which are considered to have had a significant impact on an individual’s ability to produce the expected volume of research outputs in the assessment period.

40. Other circumstances comparable with the examples in paragraph 39 will be considered, as long as an explanation is provided as to the way in which they are said to have impacted on the individual’s ability to produce the expected volume of research outputs.

41. Panels will review the information provided regarding individual circumstances. They will determine whether those circumstances can reasonably be considered to have affected the individual’s ability to produce the expected volume of research outputs and, if so, whether and to what extent they will reduce the volume requirement in respect of that individual.

42. While guidance is given below on the information to be provided by HEIs in respect of individual circumstances, it is for the panel to decide the extent of any reduction in the volume requirement.

43. Information about individual circumstances of Category A or C staff should be submitted in RA5b. HEIs must provide the panel with sufficient information regarding the individual circumstances to enable them to assess the extent of the impact of those circumstances on the individual’s research capability. This will normally include:

a. A broad description of the nature of the circumstances (e.g., ill-health, maternity leave).

b. The timing of circumstances, i.e., when they occurred.

c. The duration of the circumstances.

d. The extent of the impact of the circumstances on the individual’s ability to carry out research activities (e.g., impossible to carry out research at all, roughly 50% reduction in time available).

44. As indicated above, an outline description of the nature of the circumstances must be given. This is required so that the panel can ensure that it treats similar situations in a consistent manner. However, personal details such as the precise diagnosis of medical problems need not be given, as long as the HEI explains clearly the nature of the impact on the individual’s research capability. It is for the HEI to satisfy itself that the relevant circumstances exist or have existed and that the impact is as described. The panel will seek further information about individual circumstances where it feels unable to make a decision on the basis of the information provided.

45. All information submitted in RA5b will be kept confidential by the RAE team and by the panel members, who are subject to confidentiality undertakings in respect of all information contained in submissions. It will be used only for the purposes of assessing the RAE submission in which it is contained, will not be published at any time and will be destroyed on completion of the RAE.

46. It is the responsibility of the HEI to ensure that the information in RA5b is submitted in compliance with the Data Protection Act 1998 and all other legal obligations.

47. Panels will use the information supplied confidentially in RA5b in assessing submissions against their published criteria. Panels will not take account of circumstances that may be known to them, but which are not referenced in submissions.
48. In the case of part-time working, HEIs must include an entry in RA5b if they wish a sub-panel to consider this as a mitigating factor for a researcher citing fewer than four outputs.

49. Academic and academic-related duties which might be expected for any staff member working in a UK HEI, including teaching and administration, are not regarded as an explanation in themselves for listing fewer than four items of research output against an individual.

50. The work of Category C staff will not be given less weight purely because the basis of their relationship with the institution is different from that of Category A staff. However, panels may reasonably form a view as to the extent and value of the contribution made by individuals listed in Category C in the light of evidence available.

51. For each individual returned as Category C, HEIs must provide information in RA5c demonstrating that their research is clearly and demonstrably focused in the department that returns them. Sub-panels’ criteria statements give examples of the types of evidence to be supplied in each case. If a sub-panel is not convinced by the evidence provided for a Category C staff individual, it may take account of this in assessing that individual’s contribution to the research of the department.

**Interdisciplinary research: arrangements for cross-referral and specialist advice**

52. In view of concerns that the assessment of interdisciplinary research has presented challenges in previous RAEs (see paragraph 12 of RAE 01/2004 ‘Initial decisions by the UK funding bodies’), panels will continue to have access to mechanisms for cross-referring parts of submissions. There will also be enhanced arrangements for using specialist advisers to ensure that interdisciplinary research is assessed by those competent to do so.

53. An HEI may request that parts of submissions it makes to one UOA are cross-referred to other relevant sub-panels. The RAE team will consider all such requests but will not be bound by them. ‘Parts of submissions’ may range from all the research output listed against a submitted researcher, to all the research output and textual commentary relating to one or more research groups. HEIs may not request cross-referral of either entire submissions, or single outputs, although sub-panels may refer single outputs to specialist advisers (see paragraph 55).

54. Sub-panels may also request cross-referral of parts of submissions on the same grounds, even where submitting HEIs have not done so. In all cases, whether requested by a sub-panel or an HEI, the RAE manager will consider the request, and take advice from the relevant main and sub-panel chairs. Where it is thought that cross-referral will enhance the assessment process, the relevant parts will be cross-referred to all the sub-panels concerned. Although advice will be sought only on the quality of the cross-referred parts, the entire submission will be made available to the receiving panel so that it can judge the cross-referred part in context. Advice from other sub-panels on cross-referred parts will be sought and given on the basis of the assessment criteria for the UOA to which the work was originally submitted. The sub-panel for the UOA to which the work was originally submitted will retain responsibility for recommending the quality profile awarded.

55. Sub-panels may request that parts of submissions, including but not limited to interdisciplinary research, are referred to specialist advisers where they believe this will enhance the assessment process. This includes where HEIs identify single or multiple research outputs as being outcomes of interdisciplinary research. The RAE team has a database of individuals who were nominated as specialist advisers through the process described in RAE 03/2004 ‘Units of assessment and recruitment of panel members’.
Assessment of applied research and practice-based research

56. As we indicated in RAE 01/2004 ‘Initial decisions by the UK funding bodies’, we have striven to ensure that the panel membership comprises individuals who have experience in conducting, managing and assessing high quality research; as well as experts who are well equipped to participate in the assessment of applied research and practice-based research from a practitioner, business or other user perspective.

57. Panels will treat on an equal footing excellence in research across the spectrum of applied research, practice-based and basic/strategic research, wherever that research is conducted. Panel criteria encompass a range of indicators of excellence that are sufficiently broad to enable them to recognise the distinctive characteristics of applied research and practice-based research, and to ensure that they apply their quality benchmarks equitably. The panel criteria statements detail how they will assess a broad range of research, including applied research relevant to users in industry, commerce and the public sector. Certain main panels could reasonably expect submissions to cite evidence of applied research or practice-based research, and these panels have defined in their criteria statements a brief typology and appropriate criteria by which the sub-panels will assess such research.

Assessment of pedagogic research

58. Submission of pedagogic research is encouraged where it meets the definition of research for the RAE at Annex 3. Pedagogic research pertaining to sectors other than higher education (for example, pre-school, compulsory education, or lifelong learning) falls squarely within the remit of UOA 45 (Education). We anticipate that submissions substantially comprising research on pedagogy in these sectors would normally be submitted to UOA 45, but see also paragraph 61 below. Higher education pedagogic research is also within the remit of UOA 45. However, in view of the arrangements described in paragraph 61, HEIs need not artificially disaggregate relatively small bodies of subject-specific higher education pedagogic research from their submissions to other UOAs.

59. The RAE team has consulted the Higher Education Academy to provide a more descriptive account of higher education pedagogic research that HEIs may find helpful in preparing submissions (see paragraph 60).

60. Pedagogic research in HE will be assessed where it meets the definition of research for the RAE. It is research which enhances theoretical and/or conceptual understanding of:

- teaching and learning processes in HE
- teacher and learner experiences in HE
- the environment or contexts in which teaching and learning in HE take place
- teaching and learning outcomes in HE
- the relationships between these processes, outcomes and contexts.

Reports of studies providing descriptive and anecdotal accounts of teaching developments and evaluations do not constitute pedagogic research. Pedagogic research is firmly situated in its relevant literature, and high quality pedagogic research makes a substantial contribution to that literature.

61. In all cases pedagogic research will be assessed by experienced and expert reviewers. Some panels have appointed as panel members one or more experts in higher education pedagogy; others consider research in higher education pedagogy to be within the collective expertise of their membership. In some main panel areas, for example engineering (Main Panel G) and in the medical and related panels (Main Panels A and B), pedagogic research will be cross-referred to a specific member or members of one of the sub-panels. However, as with any other body of research where it considers that seeking external advice will enhance the assessment process, a sub-panel may also refer some pedagogic material to specialist advisers or to the Education sub-panel for advice. We expect that panel members and specialist advisers involved in the assessment of pedagogic research will co-ordinate their activity to ensure consistency of approach in its treatment.
Dealing with declarations of interest and confidentiality

62. All main and sub-panel members, panel secretaries, and specialist advisers have declared any major interests they have in HEIs eligible to participate in the RAE. A ‘major interest’ is one that could be deemed material to their participation in assessing the submission from that HEI. They will not participate in assessing a submission from any HEI in which they have declared such an interest, and will be required to withdraw from any panel meeting during discussion of that submission. Major interests will be continually updated and a register of interests will be maintained by the RAE manager.

63. The guidance to panels on declaring and dealing with major interests is at Annex 4. How each panel will implement this guidance is described in its criteria statement. Minor interests (for example supervision of doctoral students registered at, or co-holding of grants held at, submitting institutions) will not be kept on the register, but panels will declare, minute and handle them on a case-by-case basis.

64. All main and sub-panel members, panel secretaries, and specialist advisers are bound by a duty of confidentiality governing information contained in RAE submissions and panel discussions. Details are at Annex 5.
Absences of chair and declaration of interests

1. In the event of the absence of the main panel chair, an acting chair will be appointed as required. The acting chair, in consultation with the chair, will have full powers to act.

2. All main panel members have made a declaration of their interests and will update the RAE team regularly on additional interests. Complete lists of declared interests will be updated and circulated on an *ad hoc* basis. In line with the RAE team’s guidance at Annex 4, main panel members will withdraw from the discussion of any submission in which they have declared a current or recent major interest. Main panel members will exercise particular care in considering submissions from institutions in which other main panel members have declared an interest. All main panel members are bound by confidentiality agreements.

How the main panel will work with its sub-panels

3. Sub-panels are responsible for:
   a. Preparing draft statements of relevant criteria and working methods.
   b. Making recommendations to main panels on the quality profiles to be awarded for each submission.

4. Main panels are responsible for:
   a. Reviewing and endorsing the criteria and working methods to be used by the sub-panels.
   b. Deciding on the quality profile to be awarded to each submission, following recommendations from the sub-panels.
   c. Maintaining a good level of communication and joint working with the other main panels.

5. The main panel will receive all the minutes and, as necessary, the papers of sub-panel meetings. Sub-panel chairs will bring worked assessment examples and developing profiles to the main panel meetings. The main panel chair, international members of the main panel, and the RAE team will have a joint session after each main panel meeting.
panel, and main panel observers will attend meetings of sub-panels as appropriate. The main panel will not undertake sampling or cross-referencing activities.

6. The main panel will provide advice to sub-panels, as necessary, on the means for assuring the appropriate assessment of interdisciplinary work, recognising that the majority of interdisciplinary boundaries are at interfaces with sub-panels beyond those within Main Panel K.

7. The three sub-panels have identified within their assessment criteria the processes by which evidence will be weighed and decisions made. The main panel will oversee these processes. The main panel expects to reach all its decisions by consensus, with a vote being used in the unlikely event that consensus cannot be achieved.

Consistency of quality levels

8. The panel has agreed the following expanded definitions of the quality levels. These are used by all three sub-panels:

a. **4** – quality that is world-leading in terms of originality, significance and rigour. This category is for outputs in any form which are at the forefront of research of international quality. Research at this level contributes by generating, for example, new methods, new practices, new theoretical frameworks, new understandings. In such terms, this work will have made (or will be expected to make) a highly significant contribution to its area.

b. **3** – quality that is internationally excellent in terms of originality, significance and rigour but which nonetheless falls short of the highest standards of excellence. This category is for outputs in any form which are of high quality and which match the standards of international peer reviewed research. Such work will have made (or will be expected to make) a significant contribution to its area.

c. **2** – quality that is recognised internationally in terms of originality, significance and rigour. This category is for outputs in any form which match the standards of international peer reviewed research. Such work will have made (or will be expected to make) a recognised contribution to its area.

d. **1** – quality that is recognised nationally in terms of originality, significance and rigour. This category is for outputs in any form which match the standards of peer reviewed research. Such work will have made (or be expected to make) a limited contribution to its area.

e. Unclassified – quality that falls below the standard of nationally recognised work. Or work which does not meet the published definition of research for the purposes of this assessment.

9. The panel has also defined a common understanding of the terms ‘originality’, ‘significance’ and ‘rigour’ (expanded in the case of UOA 45, Education). These are detailed in the sub-panels’ criteria statements.

10. In establishing an overall quality profile for each submission, the following percentage weightings will apply for all three UOAs within Main Panel K: research outputs 70%, research environment 20%, esteem indicators 10%.

11. All three UOAs within Main Panel K will take account of both the volume and source of research income (in total and normalised by full-time equivalent, FTE) in assessing the research environment.

12. All three UOAs within Main Panel K will take account of data relating to research students, including the source and the number of research studentships (in total and normalised by FTE) in assessing the quality of the research environment.

Methods for ensuring consistency

13. The main panel will use its international members to help benchmark judgements about levels of international quality. The main panel chair, international members of the main panel, and the main panel observers will attend sub-panel meetings as appropriate.
Elements of variation in the criteria statements

14. A diversity of research methods and activities is included within Main Panel K. The sub-panels have established broadly similar criteria and recognise the same standards of excellence. There are variations only in the following respects:

- some details in the working methods
- some variation in the use of the ‘Other relevant details’ field in RA2
- some variation in the types of esteem indicators identified and the form in which departments are asked to list esteem indicators.

15. Some discipline-specific considerations for UOA 45, Education are reflected in the criteria statement of that sub-panel. In particular, the applied and practice-based emphasis of much research in education, and its impact on policy, render particular specific variations necessary. It is also the case that entry into a career in research in education is more likely to be through non-traditional routes. The Education sub-panel has also identified slightly different working methods in order to accommodate the volume of submissions and associated outputs.

Range of indicators of excellence

16. The panel agrees that research excellence can be found within a wide range and variety of forms. All types of output will be judged on the basis of the criteria of rigour, significance and originality as defined within the sub-panels’ assessment criteria. Since the main panel does not feel that there are easily identified categories of research, these criteria are not separately defined for different types of research.

Applied research and practice-based research

17. The three sub-panels have identified consistent indicators of excellence which are applicable across the whole range of research activity (including applied research and practice-based research) undertaken within their UOAs. Their interpretations of the definitions of quality encompass applied and practice-based research. In judging the excellence of applied and practice-based research each sub-panel will draw as necessary on specialist advice from users on the sub-panels and from other specialist advisers and, where appropriate, through cross-referral to other sub-panels.

18. The three sub-panels have indicated ways in which the ‘Other relevant details’ field in RA2 should be used to elaborate on aspects of the research or its methodology where these are not immediately apparent.

Individual staff circumstances

19. The main panel strongly encourages departments to submit the work of all their excellent researchers, regardless of their individual circumstances, and welcomes the opportunity available to departments to use the confidential arrangements of RA5b to outline mitigating circumstances of individual cases. The main and sub-panels encourage departments to include in their submissions those staff whose quantity of output may have been affected by absences from research, including circumstances addressed by equality and diversity legislation. RA5b must be completed for each individual staff member (either Category A or C) who is submitting fewer than four outputs, to describe any mitigating factors which explain the impact of such circumstances on their work. This will enable the sub-panels to take full account of such mitigating circumstances.

20. Where there are fewer than four outputs per researcher and there is a valid reason (relating to the individual staff circumstances described in paragraph 39 of the generic statement), the ‘missing’ outputs (the difference between four and the number of outputs actually submitted) will not be considered further in any way. If no valid reason is provided in RA5b for fewer than four outputs being submitted, the ‘missing’ outputs will be graded as Unclassified.

21. Early career researchers are individuals who entered the academic profession on employment terms that qualified them for submission to the RAE 2008 as Category A staff on or after

Main Panel K
1 August 2003. The main and sub-panels recognises that those new to a research career might not have four outputs. In these cases, the sub-panels will judge on the merit of those outputs cited. The main and sub-panels take the view that the inclusion of researchers at every stage of their career, and evidence of an appropriate attitude to those who have taken career breaks, are positive indicators in judging the research environment. There is, however, no expectation of the full range of esteem indicators in the cases of early career researchers, part-time staff, staff who have taken career breaks or staff for whom special circumstances have been identified.

**Panel observers**

22. The main panel expects the observers to engage in the main panel's discussions by providing a Research Council perspective, particularly with respect to: the comparability of standards across panels and sub-panels; assessment of user engagement and applied research; issues of interdisciplinarity; strategic issues, particularly those relating to the health of the disciplines and the research environment; and issues related to the recognition of esteem.
Absences of chair and declaration of interests from members

1. The sub-panel has appointed a deputy chair with full powers to act, in consultation with the chair, in her absence.

2. All sub-panel members have made a declaration of their major interests and will update the RAE team regularly on additional interests. Complete lists of declared major interests will be updated and circulated on an ad hoc basis. Sub-panel members will withdraw from meetings when submissions are discussed from the HEIs in which they have declared a major interest, and will not participate in any discussion concerning those institutions. Where sub-panel members have declared a minor interest in an institution, they will not take the lead in the discussion of that institution’s submission. All sub-panel members are bound by confidentiality agreements.

UOA descriptor

3. The UOA includes: all branches of applied psychology (including clinical, counselling, educational, ergonomics, forensic, health, human factors and occupational psychology); all areas of biological psychology (including animal learning, behavioural and cognitive neuroscience, comparative and evolutionary psychology, psychopharmacology, and psychophysiology); critical psychology; developmental psychology; all areas of human experimental psychology (including cognition, perception, and psycholinguistics); individual differences; mathematical and statistical psychology; neuropsychology; qualitative psychology; social psychology. It includes psychologically relevant areas of neuroscience and cognitive science.

UOA boundaries

4. Sub-panel members have between them a broad range of experience in conducting and assessing research across the areas within the definition above. Nevertheless there may be cases where the sub-panel identifies work that it considers outside its areas of expertise. Where part of a submission is in an interdisciplinary area which goes beyond the expertise of the Psychology sub-panel alone, the sub-panel will work with other sub-panels, and/or with specialist advisers.

5. The sub-panel expects to receive submissions from all areas identified in the UOA descriptor above. It also expects to cross-refer submissions to other UOAs including: 7 (Health Services Research), 8 (Primary Care and Other Community Based Clinical Subjects), 9 (Psychiatry, Neuroscience and Clinical Psychology), 12 (Allied Health Professions and Studies), 23 (Computer Science and Informatics), 41 (Sociology), 45 (Education), 46 (Sports-Related Studies), 60 (Philosophy). The sub-panel will accept submissions in ergonomics, while recognising that submissions in this area are likely to be referred to another sub-panel or to specialist advisers. The sub-panel recognises that submissions in clinical psychology might be submitted either to UOA 44 (this sub-panel) or to UOA 9 (Psychiatry, Neuroscience and Clinical Psychology); liaison between the sub-panels will ensure the consistent application of quality levels in assessing submissions.

6. The sub-panel will seek external advice, as appropriate, from specialist advisers in areas including counselling psychology, critical psychology, ergonomics, forensic psychology, and work and organisational psychology.

7. The sub-panel will use advice from specialist advisers representing the user community in verifying claims of significance from submissions across the whole disciplinary range.

Research staff

8. The outputs of staff in Categories A and C will be assessed according to the same criteria.

9. For staff in Categories B and D, the sub-panel will, where appropriate, take account of their contribution to the current research environment. Departments are asked to identify the nature and the extent of this contribution in RA5.

10. For staff in Categories C and D, departments should only submit individuals whose research has been clearly and demonstrably focused in the department which returns them. For each Category C staff individual submitted,
departments should supply evidence in RA5c of sustained involvement in the department. This could include, for example, co-authorship with Category A staff or supervision of research students. The sub-panel will only assess data about Category C staff, including their outputs, if it is satisfied that such staff are closely involved in the research activity of the department.

11. Early career researchers are individuals who entered the academic profession on employment terms that qualified them for submission to the RAE 2008 as Category A staff on or after 1 August 2003. The sub-panel recognises that those new to a research career and those for whom special circumstances are identified might not have four outputs (see paragraph 13). The sub-panel will consider the number of outputs cited for early career researchers in the context of the number of years since their appointment. In such cases and where there are fewer than four outputs, the sub-panel will judge on the quality of those outputs cited. The sub-panel does not expect to see the full range of esteem indicators for early career researchers, part-time staff, staff who have taken career breaks or staff for whom special circumstances have been identified.

Research outputs

12. All forms of research output will be judged according to the same criteria. The sub-panel expects to receive outputs in various forms including: journal articles, books, chapters in books, published conference papers (including abstracts), data sets or software, electronic publications, government reports, technical or other reports, test materials and patents. Departments may also wish to submit other forms of output where these meet the definition of research set out in Annex 3. The sub-panel will then consider the number of outputs in the context of the number of years since their appointment. In such cases and where there are fewer than four outputs, the sub-panel will judge on the quality of those outputs cited. The sub-panel does not expect to see the full range of esteem indicators for early career researchers, part-time staff, staff who have taken career breaks or staff for whom special circumstances have been identified.

13. Departments are asked to list a maximum of four outputs per researcher in Categories A and C, and the sub-panel expects to see four outputs for each eligible full-time member of staff. It is recognised that those new to a research career, or others for whom particular circumstances have been identified, might not have four items (see paragraph 39 of the generic statement). Where fewer than four outputs are listed, departments should explain in RA5b how any individual staff circumstances have negatively affected the contribution to the submission (in terms of the volume of outputs rather than the quality). In these cases, the sub-panel will judge on the quality of those outputs cited.

14. The sub-panel expects that a member of staff for whom a jointly authored output is cited will have played a major role in its production. The sub-panel accepts that a jointly authored output may be listed by more than one individual in a department’s submission. The sub-panel will, in such cases, assess the quality of such outputs by the standards that apply to all outputs. Such outputs will be assessed at the same quality level. Where it appears, however, that the extent of repetition of jointly authored works listed within the same submission indicates a lower than normal overall volume of research activity, a proportional adjustment may be applied to the submission as part of the quality profile construction process. Institutions are asked to use the ‘Other relevant details’ field (100 word maximum) in RA2 to provide information on the proportion and nature of the contribution of individual researchers to jointly authored works and, where not immediately obvious, to provide evidence that the researcher for whom the output is cited has played a major role in its production.

15. The sub-panel anticipates the submission of four outputs in all cases except in respect of those staff for whom special circumstances apply (as identified in paragraph 39 of the generic statement). While, in general, each listed output will be given equal weight within the quality profile, the quality profile for outputs may be adjusted to give additional weight to individual
items which the sub-panel considers to be of very significant scale and scope.

16. Where there are fewer than four outputs per researcher and there is a valid reason, the 'missing' outputs (the difference between four and the number of outputs actually submitted) will not be considered further in any way. If there is no valid reason for fewer than four outputs being submitted, the 'missing' outputs will be graded as Unclassified.

17. Already applied standards of peer review will be used to inform quality judgements. The sub-panel's reading will be focused on refining quality judgements at category boundaries and on gaining evidence in less familiar areas and forms of output. The sub-panel expects collectively by the end of the exercise to have examined in detail virtually all outputs. In the case of journal articles, the sub-panel will not collectively rank publication outlets nor will it draw up a list of journals which are assumed to be automatic indicators of quality. It will, instead, be guided by its individual and collective judgements of reviewing, refereeing and editorial standards. The sub-panel emphasises that work need not be published in outlets based overseas in order to be judged as meeting levels of international quality. Conversely, outputs published in outlets based overseas will not automatically be assumed to be of international quality. The sub-panel will not assume that outputs in refereed or non-refereed outlets with which it is not familiar are of lesser quality, but will judge the individual quality of such outputs. The sub-panel recognises that it is appropriate for some types of research to be published in less prominent mainstream outlets, and that high quality psychological research may also be published in outlets associated with other disciplines. The sub-panel may request advice from specialist advisers or other sub-panels as appropriate. It will take an interest in the impact of an output on practice as well as in the academic environment.

18. The sub-panel will take no view about the timing of the publication of research work within the assessment period.

19. Items of practice-based or applied research, such as test materials and patents, which fall outside the expertise of the sub-panel will be referred to specialist advisers.

20. The sub-panel will assess research into the teaching of psychology using the same criteria as applied to other areas of research. The sub-panel will, where necessary, cross-refer parts of submissions or individual outputs in this area to the Education sub-panel or to specialist advisers for advice.

21. The listing order of authors on co-authored works will not be taken into account. However, the sub-panel will look for evidence that the researcher who has nominated the work has made an independent contribution to the research reported. The sub-panel requires departments to use the 'Other relevant details' field of RA2 to signal this contribution where this can be done briefly (eg, 'first author' or 'senior author', or 'neuropsychologist' in a multi-disciplinary output). But where the contribution cannot be stated briefly, the roles played by individual researchers within collaborative projects should be identified within RA5. Departments should also use the 'Other relevant details' field of RA2 (in a maximum of 100 words) to provide additional factual information including, for example, that a conference paper reports an invited keynote address, or that a multi-authored paper arises from an international collaboration, or to provide justification for multiple citing of co-authored outputs.

22. The sub-panel expects all departments to use the 'Other relevant details' field only for the purposes listed above. It should not be used to express opinions about the quality of the output. Any information given in comments must be verifiable through the RAE team's verification process.

23. All types of output will be judged on the basis of the criteria of rigour, significance and originality as defined below. Since the sub-panel does not feel that there are easily identified categories of research, these criteria are not separately defined for different types of research.

a. **Originality** is a characteristic of research which is not merely a replication of other work or simply applies well-used methods to
straightforward problems, but which engages with new or complex problems or debates and/or tackles existing problems in new ways.

b. **Significance** will be judged in different ways according to whether the research is basic, strategic or applied. Ways of evaluating the significance of research include judging its effects on the development of the field, examining contributions to existing debates, and assessing its impacts on policy and practice.

c. **Rigour** will be judged in many ways, and can helpfully be associated with methodological and theoretical robustness and the use of a systematic approach. It includes traditional qualities such as reliability and validity, and also qualities such as integrity, consistency of argument and consideration of ethical issues.

24. The sub-panel interprets the quality levels for outputs as follows:

a. **4* – quality that is world-leading in terms of originality, significance and rigour.** This category is for outputs in any form which are at the forefront of research of international quality. Research at this level contributes by generating, for example, new methods, new practices, new theoretical frameworks, new understandings. In such terms, this work will have made (or will be expected to make) a highly significant contribution to its area.

b. **3* – quality that is internationally excellent in terms of originality, significance and rigour but which nonetheless falls short of the highest standards of excellence.** This category is for outputs in any form which are of high quality and which match the standards of international peer reviewed research. Such work will have made (or will be expected to make) a significant contribution to its area.

c. **2* – quality that is recognised internationally in terms of originality, significance and rigour.** This category is for outputs in any form which match the standards of international peer reviewed research. Such work will have made (or will be expected to make) a recognised contribution to its area.

d. **1* – quality that is recognised nationally in terms of originality, significance and rigour.** This category is for outputs in any form which match the standards of peer reviewed research. Such work will have made (or be expected to make) a limited contribution to its area.

e. **Unclassified – quality that falls below the standard of nationally recognised work. Or work which does not meet the published definition of research for the purposes of this assessment.**

**Research environment**

Research students and research studentships

25. The sub-panel will take account of the standard data analyses provided by the RAE team and, in particular: research students supervised per research-active staff; studentships, listed by sponsor, per research-active staff; average number of research assistants supervised per research-active staff; and doctoral degrees awarded per staff FTE.

26. The sub-panel will take account of data relating to research students, including the source and the volume of research studentships (in total and normalised by FTE), in assessing the quality of the research environment.

27. Departments should disaggregate in RA5 the numbers of students on research doctorates from those on professional doctorate programmes (where the latter are eligible for return). Departments are asked to indicate in RA5 the contribution which students on professional doctorate programmes make to the research environment.

Research income

28. The sub-panel will take account of the standard data analyses provided by the RAE team and, in particular, research assistants supervised per research-active staff and research income, listed by source of income, per research-active
staff. The sub-panel will consider this information in the context of evaluating a department's research environment.

29. The sub-panel will take account of both the volume and source of research income (in total and normalised by FTE) in assessing the research environment. Information about collaboratively funded research work should be provided in RA5.

30. In addition, the sub-panel asks departments to describe in RA5, how their research income supports or facilitates the research of different groups or individuals within the department, giving details about research funding awards by source.

Research structure

31. Submitting departments are asked to describe their research structure. They may provide, inter alia, the following information:

a. Research groups (where appropriate): who belongs to them, their prime activities, how they operate and their main achievements.

b. Other UOAs to which related work has been submitted and any difficulties of fit. Submissions should also identify any areas of positive interdisciplinary interaction.

c. Where relevant, the impact of research on practice.

d. Objective evidence, verifiable through the RAE team's verification process, of an active and vital research culture.

e. The nature and quality of the research infrastructure, including significant equipment research facilities, and facilities for research students.

f. Arrangements for supporting interdisciplinary or collaborative research work.

g. Where relevant, information about relationships with research users within and across departments (including industry, commerce and the public services), and on the account taken of government policy initiatives and objectives.

Staffing policy

32. Submitting departments are asked to describe their staffing policy. They may provide, inter alia, the following information:

a. Arrangements for developing and supporting staff (including contract research staff) in their research.

b. Arrangements for developing the research of colleagues new to research and for integrating them into a wider, supportive research culture.

c. Details of how the departure of staff in Categories B and D has affected the strength, coherence and research culture of the department at the census date.

Research strategy

33. Submitting departments are invited to describe their research strategy. They may provide, inter alia, the following information:

a. Details of significant changes, if any, to the research environment over the assessment period.

b. A statement of the main objectives and activities in research over the next five years, including any ongoing research work which is not producing immediately visible outcomes.

Esteem indicators

34. Departments should list indicators of peer esteem and national and international recognition which relate to the staff submitted. Information provided in this section must be sufficiently clear to be verifiable through the RAE team's verification process.

35. The submission may give examples (since January 2001) from one or more of the following categories (sub-paragraphs a to e) up to a maximum of four examples for each researcher listed in RA1 (indicating who, what, when and/or where):

a. Research-related service for national or international bodies or committees.
b. Journal editorship and editorial activity.
c. Awards and distinctions.
d. Invited talks at conferences, keynote addresses or plenaries.
e. Research-related activities including:
   • conference organisation
   • dissemination such as Public Engagement with Science activities
   • major media coverage of research
   • participation in the Teaching and Learning Technology Programmes or similar projects
   • participation in the development of national and international policy and practice in either the public or the private sector
   • external doctoral examining nationally and internationally.

36. Departments are also invited to identify in RA5 any indicators of collective esteem for research groups within the department or for the department as a whole.

37. In judging esteem indicators, the sub-panel will take account of the volume and significance across the submission of activities in the listed esteem factors. The sub-panel will take account of the individual circumstances and the career stage of submitted staff in assessing esteem indicators. There is no expectation of the full range of esteem indicators in the cases of early career researchers, part-time staff, staff who have taken career breaks or other staff for whom special circumstances have been identified.

Applied research and practice-based research

38. In line with the other sub-panels in Main Panel K, the sub-panel has identified consistent indicators of excellence (which are defined in paragraph 23-24) which are applicable across the whole range of research activity within the UOA (including applied and practice-based research). Full recognition will be given to applied and practice-based research which is of direct relevance to the needs of the public and voluntary sectors and commerce and industry. The sub-panel’s interpretations of the definitions of quality encompass applied and practice-based research. In judging the excellence of applied and practice-based research the sub-panel will draw, as necessary, on specialist advice from users and from other specialist advisers and, where appropriate, through cross-referral to other sub-panels.

Individual staff circumstances

39. Departments should note any individual staff circumstances which have significantly affected their contribution to the submission as defined in paragraph 39 of the generic statement.

40. Departments are asked, through RA5b, to explain how any individual staff circumstances have negatively affected that individual’s contribution to the submission in terms of the quantity of outputs rather than the quality.

41. The sub-panel takes the view that the inclusion of researchers at every stage of their career, and evidence of an appropriate attitude to those who have taken career breaks or for whom other special circumstances are identified, are positive indicators in judging the research environment.

Working methods

42. The assessment will be one of peer review based on professional judgement. The sub-panel will take a systematic, but non-quantitative, approach. Its assessment of quality will be reached by examining the whole submission at a number of levels. All forms of output will be judged according to the same criteria.

43. Each sub-panel member will read every department’s submission in advance of the initial meeting, and will arrive at an independent preliminary view about the quality profile for environment and esteem and a view of the range of quality which may be present in the outputs listed. These independent profiles will be submitted and collated by the sub-panel secretary before the first profiling meeting of the sub-panel, and will form the background for discussion. Preliminary assessments will identify areas within
submissions where further work needs to be conducted. All submissions will thereafter be assessed in detail by two (or more in the case of larger submissions) sub-panel members, who will take the lead in discussing those submissions. The sub-panel expects collectively by the end of the exercise to have examined in detail virtually all outputs.

44. In establishing an overall quality profile for each submission, the sub-panel will allocate the following percentage weightings: research outputs 70%, research environment 20%, esteem indicators 10%.

45. The sub-panel will build a quality profile for the research environment of a submitting department using various contributing factors including: research students, studentships and training; research income; research infrastructure, staffing policy and support, and future plans. The 20% of the overall quality profile allocated to research environment may therefore be distributed across different quality levels where there is divergence in the judgements of quality of these different elements. The 10% of the overall quality profile attributed to the esteem indicators of a submitting department will be allocated similarly, taking into account the level and the type of the various cited indicators of esteem, and bearing in mind what may be expected of staff at different stages of their research careers.

46. The sub-panel expects to reach all its decisions by consensus, with a vote in the unlikely event that consensus cannot be achieved.

47. Work developed in two or more UK institutions may be submitted for assessment as a coherent whole. Joint submissions will be assessed in the same way as submissions from single institutions. The sub-panel expects joint submissions to give evidence of active research collaboration.

48. In the case of cross-referrals and interdisciplinary work, the sub-panel will refer parts of submissions and individual outputs to other sub-panels and/or specialist advisers as required and in accordance with paragraphs 52-55 of the generic statement. The decision about the recommendation to the main panel of a particular quality level rests with the sub-panel. The sub-panel is conscious that benchmark standards of excellence may not apply equally to research in new interdisciplinary fields, and will take particular care in assessing interdisciplinary outputs.

49. The main panel will receive all the minutes and, as necessary, the papers of sub-panel meetings. Sub-panels will bring worked assessment examples and developing profiles to the main panel meetings. The main panel chair, international members and observers from the main panel will attend meetings of sub-panels as appropriate. Advice from specialist advisers representing the user community will be used by the sub-panel in verifying claims of significance from submissions across the whole disciplinary range. The main panel will not undertake sampling or cross-referencing.
Absences of chair and declaration of interests from members

1. The sub-panel has appointed a deputy chair with full powers to act, in consultation with the chair, in her absence.

2. All sub-panel members have made a declaration of their major interests and will update the RAE team regularly on additional major interests. Complete lists of declared major interests will be updated and circulated on an ad hoc basis. Sub-panel members will withdraw from meetings when submissions are discussed from the institutions in which they have declared a major interest, and will not participate in any discussion concerning those institutions. Where sub-panel members have declared a minor interest in an institution, they will not take the lead in the discussion of that institution’s submission. All sub-panel members are bound by confidentiality agreements.

UOA descriptor

3. Research in education is multidisciplinary and closely related to a range of other disciplines with which it shares blurred boundaries. The Education UOA and its associated communities of users may be broadly described as concerned with research in the areas identified in the following illustrative and non-exhaustive lists:

a. Research which focuses on education systems including: pre-school, primary, secondary, further, higher, teacher or other professional, adult, continuing, vocational and community education or training; informal learning; work-based learning; lifelong learning.

b. Research which addresses substantive areas such as: assessment, curriculum, teaching, pedagogy, learning, inter-professional education, information and communication technology in education, special educational needs; curricular areas; comparative, international and development education; education and industry; education policy; organisation, governance and management; social exclusion/inclusion and equity issues.

c. Research which employs qualitative and quantitative methodologies drawn from a variety of disciplinary traditions (including but not limited to applied linguistics, economics, geography, history, humanities, linguistics, mathematics, philosophy, psychology, science, sociology and other disciplines of education) as well as other multidisciplinary methodologies, such as: action research, case study, ethnography, evaluation, literature review, critical theory, documentary analysis, analytic work.

UOA boundaries

4. The diversity of content and methodology in research in education requires the sub-panel to be flexible in marking the boundaries of work relevant to the RAE. Sub-panel members have between them a broad range of experience in conducting and assessing research across the areas within the definition above. Nevertheless there may be cases where the sub-panel identifies work that it considers outside its areas of expertise. Where part of a submission is in an area which goes beyond the expertise of the sub-panel, it will work with other sub-panels and/or with specialist advisers.

5. The sub-panel expects to receive submissions from all areas identified in the UOA descriptor above. It also expects to cross-refer with other sub-panels as necessary.

6. The sub-panel recognises that submissions in professional education (including medical education) and in pedagogical research in HE might be submitted either to UOA 45 or to another relevant UOA; liaison between the sub-panels will ensure the consistent application of quality levels in assessing submissions.

7. The sub-panel will consider submissions in counselling where this has an educational orientation. Submissions in this area are likely to be referred to another sub-panel or to specialist advisers.
Research staff

8. The outputs of staff in Categories A and C will be assessed according to the same criteria.

9. For staff in Categories B and D, the sub-panel will, where appropriate, take account of their contribution to the current research environment. Departments are asked to identify the nature and the extent of this contribution in RA5.

10. For staff in Categories C and D, departments should only submit individuals whose research has been clearly and demonstrably focused in the department which returns them. For each Category C staff individual submitted, departments should supply evidence of sustained involvement in the department, in RA5c. This could include, for example, co-authorship with Category A staff, or supervision of research students. The sub-panel will only assess data about Category C staff, including their outputs, if it is satisfied that such staff are closely involved in the research activity of the department.

11. Early career researchers are individuals who entered the academic profession on employment terms that qualified them for submission to the RAE 2008 as Category A staff on or after 1 August 2003. The sub-panel acknowledges that educational researchers are drawn from a diversity of backgrounds and bring a range of expertise to the field. It is recognised that those new to a research career and those for whom other special circumstances are identified might not have four outputs (see paragraph 13). The sub-panel will consider the number of outputs cited for early career researchers in the context of the number of years since their appointment on the terms identified above. The sub-panel does not expect to see the full range of esteem indicators for early career researchers, part-time staff, staff who have taken career breaks or others for whom particular circumstances have been identified might not have four items (see paragraph 39 of the generic statement). Where fewer than four outputs are listed it is expected that a case will be made in RA5(b) and that the department will identify any individual staff circumstances have affected how any individual staff circumstances have affected the contribution (in terms of the volume of outputs rather than the quality) of that individual to the submission. In these cases, the sub-panel will judge the quality of those outputs cited.

12. The sub-panel welcomes the submission of all forms of research output and will treat them equally. The sub-panel expects to receive outputs in the following forms: articles in journals and e-journals; books; chapters in books; published conference papers; research reviews, electronic and online publications; government reports; technical or other reports. Institutions may also wish to submit other forms of output where these meet the definition of research set out in Annex 3. Where there is likely to be any uncertainty about whether the output meets this definition (for example in the case of articles in professional outlets, teaching materials, DVDs/videos, software and software-related products), the sub-panel will expect evidence to be provided in the ‘Other relevant details’ field of RA2 (150 word maximum), that the output is indeed research-based and, in particular, satisfies the criterion relating to rigour. In all cases, the sub-panel will have regard to the research quality and not to the type of output. In accordance with the terms of RAE 2008 as stated in paragraph 53 of RAE 01/2004 ‘Initial decisions by the UK funding bodies’, the sub-panel emphasises that it will be making judgements on research outputs and will not rate or score individual researchers.

13. Departments are asked to list a maximum of four outputs per researcher in Categories A and C, and the sub-panel expects to see four outputs for each eligible full-time member of staff. It is recognised, however, that those new to a research career, part-time staff, staff who have taken career breaks or others for whom particular circumstances have been identified might not have four items (see paragraph 39 of the generic statement). Where fewer than four outputs are listed it is expected that a case will be made in RA5(b) and that the department will identify how any individual staff circumstances have affected the contribution (in terms of the volume of outputs rather than the quality) of that individual to the submission. In these cases, the sub-panel will judge the quality of those outputs cited.

14. The sub-panel recognises that many outputs will be jointly authored and will assess their quality by the standards that apply to all outputs. It expects that a member of staff for whom a jointly authored work is cited will have played a major role in its production. The sub-panel also accepts that a jointly authored output may be listed by more than one individual from the same
department, different departments or different institutions and these may be submitted in the same or different submissions. In such cases it will be assessed at the same quality level. Where it appears, however, that the extent of repetition of jointly authored works listed within the same submission indicates a lower than normal overall volume of research activity, a proportional adjustment may be applied to the submission as part of the quality profile construction process. Institutions are invited to use the 'Other relevant details' field in RA2 to provide information on the proportional contribution of individual researchers to jointly authored works.

15. The sub-panel anticipates the submission of four outputs in all cases except in respect of those staff for whom special circumstances apply (as identified in paragraph 39 of the generic statement). While, in general, each listed output will be given equal weight within the quality profile, the quality profile for outputs may be adjusted to give additional weight to individual items which the sub-panel considers to be of very significant scale and scope.

16. Where there are fewer than four outputs per researcher and there is a valid reason, the ‘missing’ outputs (the difference between four and the number of outputs actually submitted) will not be considered further in any way. If there is no valid reason for fewer than four outputs being submitted, the ‘missing’ outputs will be graded as Unclassified.

17. Because of the range of work and publication media within the discipline, the sub-panel will not collectively rank publications, nor will it draw up a list of journals which will be assumed to be automatic indicators of quality. The sub-panel expects collectively by the end of the exercise to have examined in detail virtually all of the outputs. The sub-panel emphasises that work need not be published with publishers or in outlets based overseas, or in high status outlets, or in any particular type of outlet in order to be judged as meeting international standards of excellence. Conversely, outputs published in outlets based overseas will not automatically be assumed to be of international or world-leading quality. The sub-panel will, moreover, keep in mind the differences between the English (including differences between the English regions), Northern Irish, Scottish and Welsh contexts, the distinctiveness of some systemic features and developments, and the importance of some country-specific outlets.

18. The sub-panel will take no view about the timing of the publication of research work within the assessment period.

19. While recognising that there are differences between strongly theoretical and strongly applied research, the sub-panel does not consider there to be a set of clear and distinguishable categories into which educational research can be classified. The sub-panel adopts Furlong and Oancea’s definition\(^1\) of applied and practice-based research as ‘an area situated between academia-led theoretical pursuits and research-informed practice, as consisting of a multitude of models in research explicitly conducted in, with, and/or for practice’.

20. The sub-panel will take an interest, as appropriate for the area of research, in the impact and potential impact of an output on policy or practice, as well as in the academic environment, as part of its consideration of the significance of research.

21. The sub-panel will assess curriculum, teaching and assessment materials using the same criteria as applied to other areas of research. Such materials must be published, and it must be made clear in the ‘Other relevant details’ field in RA2 how they embody original research as defined in the definition of research for the RAE at Annex 3.

22. The sub-panel requires departments to use the ‘Other relevant details’ field (maximum 150 words) of RA2 to identify:

- field of enquiry
- theoretical perspectives, analytical and/or empirical methods used
- original contribution to theory/methodology/policy/practice (see paragraph 26 below)

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• where appropriate, to provide evidence of significance as defined by the sub-panel in paragraph 27 below, for example that a book has won an international award or a paper reports an invited keynote address at a major conference
• information about the research basis and in particular how the criterion of rigour (see paragraph 28) is met, especially for outputs where the research basis or contribution may not be clear (e.g., articles in professional outlets, teaching or other materials for practitioners)
• information about the refereeing procedures to which the output has been subject
• the proportional contribution of the author where the output is jointly authored
• where relevant, information relating to, and a clear justification for, any multiple citing of the output within a submission.

23. Hypothetical example: Humanities in primary schools – short booklet containing advice to teachers and policymakers based on a synthesis of international research. This provides an innovative conceptualisation of the field and has been referred to by the Training and Development Agency for Schools (2007) as the basis for its criteria for CPD in this area. The review considered 1,250 references of which 41 met the criteria set for inclusion. The full review has been accepted for publication by Springer in 2008. The distillation of the implications of the literature was done by a working group of five researchers and five teachers. The draft was refereed by two international referees and piloted by ten teachers and four policymakers to ensure it was appropriate and user-friendly. It is cited by two researchers because of the considerable work involved in its production; they contributed equally and co-directed the project, financed by a £15,000 grant from Tesco.

24. The sub-panel expects all departments to use the ‘Other relevant details’ field in RA2 only for the purposes listed above. It should not be used to express opinions about the quality of the output. Any information given in comments must be verifiable through the RAE team’s verification process.

25. All types of output will be judged on the basis of the criteria of rigour, significance and originality as defined below. Since the sub-panel does not feel that there are easily identified categories of research, these criteria are not separately defined for different types of research.

26. Originality is a characteristic of research which is not merely a replication of other work or simply applies well-used methods to straightforward problems, but which engages with new or complex problems or debates and/or tackles existing problems in new ways. So, for example, a review of existing research can demonstrate originality if it analyses and/or synthesises the field in new ways, providing new and salient conceptualisations. Originality can also lie in the development of innovative designs, methods and methodologies, analytical models or theories and concepts.

27. Significance can be judged in different ways according to whether the research is basic, strategic or applied. Research has, or has the potential to have, considerable significance if it breaks new theoretical or methodological ground, provides new social science knowledge or tackles important practical, current problems, and provides trustworthy results in some field of education. These results might be empirical or analytical and theoretical, providing new (and sometimes challenging) conceptualisations, and evidence for audiences ranging from academics to policymakers and practitioners. Ways of evaluating the significance of research include judging its effects or potential effect on the development of the field, examining contributions to existing debates, and assessing its impact or potential impact on policy and practice. The nature and degree of immediate impact on policymakers or practitioners will provide some useful indication of significance in terms of ‘value for use’. However, there may be reasons for high impact that are not dependent on research quality; and, equally, in many cases the observable impact of high quality research is achieved only over the longer term. Theoretical and more
analytical research can also be of high significance if it takes forward the state of current international knowledge in its field, and has influenced, or has the potential to influence, the work of other theoreticians. In education it is possible that such significant theoretical advances also influence practitioners and/or policymakers, although it will probably need a deliberate strategy to ensure that this happens. Where appropriate, evidence of any of these forms of significance should be provided in the ‘Other relevant details’ field of RA2.

28. **Rigour** can be judged in many ways, and can helpfully be associated with methodological and theoretical robustness and the use of a systematic approach. It includes traditional qualities such as reliability and validity, and also qualities such as integrity, consistency of argument and consideration of ethical issues. It certainly entails demonstrating a sound background of scholarship, in the sense of familiarity and engagement with relevant literature, both substantive and methodological. Different dimensions of rigour will be important in different types of research but rigour can best be assessed on a case by case basis using whichever dimensions are most appropriate. In the case of outputs that are primarily directed towards utility, it is still the rigour of the underpinning research work that will be assessed and will need to be evident.

29. The sub-panel interprets the quality levels for outputs as follows:
   a. **4* – quality that is world-leading in terms of originality, significance and rigour.** This category is for outputs in any form which are at the forefront of research of international quality. Research at this level contributes by generating, for example, new methods, new practices, new theoretical frameworks, new understandings. In such terms, this work will have made (or will be expected to make) a highly significant contribution to its area.
   b. **3* – quality that is internationally excellent in terms of originality, significance and rigour but which nonetheless falls short of the highest standards of excellence.** This category is for outputs in any form which are of high quality and which match the standards of international peer reviewed research. Such work will have made (or will be expected to make) a significant contribution to its area.
   c. **2* – quality that is recognised internationally in terms of originality, significance and rigour.** This category is for outputs in any form which match the standards of international peer reviewed research. Such work will have made (or will be expected to make) a recognised contribution to its area.
   d. **1* - quality that is recognised nationally in terms of originality, significance and rigour.** This category is for outputs in any form which match the standards of peer reviewed research. Such work will have made (or be expected to make) a limited contribution to its area.
   e. **Unclassified – quality that falls below the standard of nationally recognised work. Or work which does not meet the published definition of research for the purposes of this assessment.**

**Research environment**

**Research students and research studentships**

30. The sub-panel will consider the standard data analyses provided by the RAE team.

31. The sub-panel will take account of data relating to research students, including the source and the volume of research studentships (in total and normalised by full-time equivalent, FTE), in assessing the quality of the research environment.

32. The numbers of doctoral degrees awarded will be a strong factor in assessing the research environment.

33. The sub-panel recognises the equal worth of professional and other doctoral qualifications. In order to obtain a clearer understanding of the research environment, departments are asked to provide in RA5 a disaggregation of professional
and other doctorates. Departments are asked to indicate in RA5 the contribution which these various doctoral programmes make to the research environment.

Research income

34. The sub-panel will consider the standard data analyses provided by the RAE team.

35. The sub-panel will take account of both the volume and source of research income (in total and normalised by FTE) in assessing the research environment. Information about collaboratively funded research work should be provided in RA5.

36. In addition, the sub-panel asks departments to describe in RA5 how their research income supports or facilitates the research of different groups or individuals within the department, giving details about research funding awards by source.

Research structure

37. Where appropriate, departments are invited to provide information about any research groupings: who belongs to them, their prime activities, how they operate and their main achievements. The sub-panel recognises that high quality educational research can be conducted by lone researchers.

38. In describing their research structure, departments are also asked to provide, inter alia, the following information:

a. Objective evidence, verifiable through audit, of an active and vital research culture.

b. The nature and quality of the research infrastructure, including significant research support and facilities, and facilities for research students.

c. Any areas of interdisciplinary and multi-professional interaction.

d. Arrangements for supporting interdisciplinary or collaborative research work.

e. Other UOAs to which related work has been submitted and any difficulties of fit.

39. Where relevant, departments should describe their strategies for engaging with policy makers and professional practitioners, and provide information about relationships with research users within and across institutions (including public services, voluntary bodies and industry). Departments are also invited to detail, where appropriate, contributions to regional, national, UK-wide and international government policy initiatives and objectives.

Staffing policy

40. Submitting departments are asked to describe their staffing policy. They may provide, inter alia, the following information:

a. Arrangements for developing and supporting staff (including contract research staff) in their research.

b. Arrangements for developing the research of colleagues new to research and for integrating them into a wider, supportive research culture.

c. Details of how the departure of staff in Categories B and D has affected the strength, coherence and research culture of the department at the census date.

Research strategy

41. Submitting departments are invited to describe their research strategy. They may provide, inter alia, the following information:

a. Details of significant changes, if any, to the research environment over the assessment period.

b. A statement of the main objectives and activities in research over the next five years, including any ongoing research work which is not producing visible outcomes.

c. The contribution of the department to national and international capacity building in education research.
Esteem indicators

42. Departments should list indicators of peer and professional esteem, and national, UK and international recognition which relate to the staff submitted. Information provided in this section must be sufficiently clear to be verifiable through the RAE team's verification process.

43. The submission may give examples (since January 2001) of a maximum of four esteem indicators for each individual researcher listed in RA1, from any one or several of the following categories. The sub-panel does not expect that esteem indicators will be listed for all members of staff listed in the RA1 and will take account of the individual circumstances and the career stage of submitting staff in assessing esteem indicators. Departments are also invited to identify in RA5 any indicators of collective esteem for research groups within the department or the department as a whole. Examples of individual or collective esteem might include:

- journal and book series editorships and editorial board membership
- keynote addresses or prestigious public lectures given in international forums
- membership of Research Council committees
- evidence of impact on policy and professional practice
- advice to Government, Parliament, devolved and English regional administrations, other national, international, regional or local agencies; advice to non-government organisations and to private practice
- competitively won research fellowships
- competitively funded studentships and post-doctoral fellowships
- status as an Economic and Social Research Council Recognised Centre
- international recognition, such as international research collaborations, visiting research posts in overseas institutions, involvement at senior levels in international research associations, acting as referee for national and international research councils
- major awards, prizes and honorary degrees, including election to national and international learned societies
- external doctoral examining nationally and internationally
- research-based contributions to practitioner and academic conferences.

44. In judging esteem indicators, the sub-panel will take account of the volume and significance across the submission of activities in the listed esteem factors.

Applied research and practice-based research

45. In line with the other sub-panels in Main Panel K, the sub-panel has identified consistent indicators of excellence (which are defined in paragraphs 26 to 29) which are applicable across the whole range of research activity in the UOA (including applied and practice-based research). The sub-panel's interpretation of the definitions of quality encompasses applied and practice-based research. Full recognition will be given to applied and practice-based research which is of direct relevance to the needs of the public and voluntary sectors and commerce and industry. In judging the excellence of applied and practice-based research the sub-panel will draw, as necessary, on specialist advice from users on the sub-panel and from other specialist advisers and, where appropriate, through cross-referral to other sub-panels.

Individual staff circumstances

46. Departments should note any individual staff circumstances which have significantly affected their contribution to the submission as defined in paragraph 39 of the generic statement.

47. Departments are asked, through RA5b, to explain how any individual staff circumstances have negatively affected that individual's contribution to the submission (in terms of the quantity of outputs rather than the quality).

48. The sub-panel takes the view that the inclusion of researchers at every stage of their
career, and evidence of an appropriate attitude to those who have taken career breaks or for whom other special circumstances are identified, are positive indicators in judging the research environment.

**Working methods**

49. The assessment will be one of peer review based on professional judgement. The sub-panel will take a systematic, but non-quantitative, approach to its assessment. The sub-panel’s assessment of quality will be reached by examining the whole submission at a number of levels. All forms of output will be judged according to the same criteria.

50. In advance of the initial meeting, each sub-panel member will familiarise him/herself with all submissions and study in detail a varied sample in order to arrive independently at provisional judgements of environment and esteem. This will provide information for an initial moderation exercise. At the initial meeting, and in later discussions, two or more sub-panel members will take responsibility for presenting each submission, one of whom will take the lead. The sub-panel expects collectively by the end of the exercise to have examined in detail virtually all outputs.

51. The sub-panel may seek guidance from specialist advisers or other sub-panels as appropriate.

52. In the case of cross-referrals and interdisciplinary work, the sub-panel will refer submissions and groups of outputs to other sub-panels and/or specialist advisers as required and in accordance with paragraphs 52-55 of the generic statement. The decision about the recommendation to the main panel of a particular quality level rests with the sub-panel. The sub-panel is conscious that benchmark indicators of quality may not apply equally to research in new interdisciplinary fields, and will take particular care in assessing interdisciplinary outputs.

53. Work developed in two or more UK institutions may be submitted for assessment as a coherent whole. Joint submissions will be assessed in the same way as submissions from single institutions. The sub-panel expects joint submissions to give evidence of active research collaboration.

54. In establishing an overall quality profile for each submission, the sub-panel will allocate the following percentage weightings: research outputs 70%, research environment 20%, esteem indicators 10%.

55. The sub-panel will build a quality profile for the research environment of a submitting department using various contributing factors. These include: research income, staffing profile and support, research students and training, research infrastructure and plans. The 20% of the overall quality profile allocated to research environment may therefore be distributed across different quality levels where there is divergence in the judgements of quality of these different elements. The 10% of the overall quality profile attributed to the esteem indicators will be allocated similarly, taking into account the level and the type of the cited indicators of esteem, and bearing in mind what may be expected of staff at different stages of their research careers.

56. The sub-panel expects to reach all its decisions by consensus, with a vote being used in the unlikely event that consensus can not be achieved.

57. The research users on the sub-panel will support its work in the same way as other members of the sub-panel, and will bring particular expertise to judgements about the impact and significance of applied and practice-based research.

58. The main panel will receive all the minutes and, as necessary, the papers of sub-panel meetings. Sub-panels will bring worked assessment examples and developing profiles to the main panel meetings. The main panel chair, international members and observers from the main panel will attend meetings of sub-panels as appropriate. The main panel will not undertake sampling or cross-referencing.
Absences of chair and declaration of interests

1. The sub-panel has appointed a deputy chair with full powers to act, in consultation with the chair, in his absence.

2. All sub-panel members have made a declaration of their major interests and will update the RAE team regularly on additional major interests. Complete lists of declared major interests will be updated and circulated on an ad hoc basis. Sub-panel members will withdraw from meetings when submissions are discussed from the institutions in which they have declared a major interest, and will not participate in any discussion concerning those institutions. Where sub-panel members have declared a minor interest in an institution, they will not take the lead in the discussion of that institution’s submission. All sub-panel members are bound by confidentiality agreements.

UOA descriptor

3. Research within the unit of assessment is diverse, multidisciplinary and interdisciplinary. It falls within a variety of disciplines within the main subject areas of physical activity, exercise, sport and leisure. These disciplines may include biochemistry, biomechanics, business and management, economics and finance, engineering, geography, health, history, law, medicine, motor learning and control, nutrition, outdoor education, philosophy, physical education, physiology, policy studies, politics, psychology, sociology and tourism studies.

UOA boundaries

4. The diversity of content, disciplines and methodologies in the research which falls within the UOA requires the sub-panel to be flexible in marking the boundaries of work relevant to the RAE. Sub-panel members have between them a broad range of experience in conducting and assessing research across the different areas contained within the definition above. Nevertheless there may be cases where the sub-panel identifies work that it considers outside its areas of expertise. Where a submission is in an interdisciplinary area which goes beyond the expertise of the sub-panel alone, the sub-panel will work with other sub-panels, and/or with specialist advisers.

5. The sub-panel expects to receive submissions from all areas identified in the UOA descriptor above. It may cross-refer as necessary to other sub-panels, and recognises that there are likely to be many sub-panels to which such cross-referral could be made.

6. The sub-panel will seek external advice, as appropriate, from specialist advisers.

Research staff

7. The outputs of staff in Categories A and C will be assessed according to the same criteria.

8. For staff in Categories B and D, the sub-panel will, where appropriate, take account of their contribution to the current research environment. Departments are asked to identify the nature and the extent of this contribution in RA5.

9. For staff in Categories C and D, departments should only submit individuals whose research has been clearly and demonstrably focused in the department which returns them. For each Category C staff individual submitted, departments should supply evidence of sustained involvement in the department, in RA5c. This could include, for example, co-authorship with Category A staff, or supervision of research students. The sub-panel will only assess data about Category C staff, including their outputs, if it is satisfied that such staff are closely involved in the research activity of the department.

10. Early career researchers are individuals who entered the academic profession on employment terms that qualified them for submission to the RAE 2008 as Category A staff on or after 1 August 2003. The sub-panel recognises that those new to a research career and those for whom special circumstances are identified might not have four outputs (see paragraph 12). The sub-panel will consider the number of outputs cited for early career researchers in the context of the number of years since their appointment. In
such cases and where there are fewer than four outputs the sub-panel will judge on the quality of the outputs cited. The sub-panel does not expect to see the full range of esteem indicators for early career researchers, part-time staff, staff who have taken career breaks, or staff for whom special circumstances have been identified.

Research outputs

11. Departments may submit all forms of output where these meet the definition of research set out in Annex 3. All forms of research output will be judged according to the same criteria. The sub-panel expects to receive a variety of forms of research outputs for both theoretical and practice-based or applied research, including: journal articles, books, academic papers, materials, chapters in books, government, technical and other reports, published conference papers, patents, devices, and electronic and online publications. The sub-panel will, in all cases, have regard to the quality and not to the type of output (see also paragraph 38 below). In accordance with the terms of RAE 2008, as stated in paragraph 53 of RAE 01/2004 ‘Initial decisions by the UK funding bodies’, the sub-panel emphasises that it will be making judgements on research outputs and will not rate or score individual researchers.

12. Departments are asked to list a maximum of four outputs per researcher in Categories A and C, and the sub-panel expects to see four outputs for each eligible full-time member of staff. It is recognised that those new to a research career, or others for whom particular circumstances have been identified, might not have four items (see paragraph 39 of the generic statement). Where fewer than four outputs are listed, departments should explain in RA5b how any individual staff circumstances have negatively affected the contribution to the submission (in terms of the volume of outputs rather than the quality). In these cases, the sub-panel will judge on the quality of those outputs cited.

13. The sub-panel expects that a member of staff for whom a jointly authored output is cited will have played a major role in its production. The sub-panel accepts that a jointly authored output may be listed by more than one individual in a department’s submission. The sub-panel will, in such cases, assess the quality of such outputs by the standards that apply to all outputs. Such outputs will be assessed at the same quality level. Where it appears, however, that the extent of repetition of jointly authored works listed within the same submission indicates a lower than normal overall volume of research activity, a proportional adjustment may be applied to the submission as part of the quality profile construction process. Institutions will be invited to use the ‘Other relevant details’ field (100 word maximum) in RA2 to provide information on the proportion and nature of the contribution of individual researchers to jointly authored works.

14. The sub-panel anticipates the submission of four outputs in all cases except in respect of those staff for whom special circumstances apply (as identified in paragraph 39 of the generic statement). While, in general, each listed output will be given equal weight within the quality profile, the quality profile for outputs may be adjusted to give additional weight to individual items which the sub-panel considers to be of very significant scale and scope.

15. Where there are fewer than four outputs per researcher and there is a valid reason, the ‘missing’ outputs (the difference between four and the number of outputs actually submitted) will not be considered further in any way. If there is no valid reason for fewer than four outputs being submitted, the ‘missing’ outputs will be graded as Unclassified.

16. The sub-panel expects collectively to examine in detail virtually all outputs within the context of the quality framework before the end of the exercise. The sub-panel’s reading will be focused on refining quality judgements at category boundaries and on gaining evidence in less familiar areas and forms of output. In the case of journals, the sub-panel will not collectively rank publication outlets which will be assumed to be automatic indicators of quality nor (given the range of work and publication media within the discipline) will it draw up a list of outlets which...
will be assumed to be automatic indicators of quality. Already applied standards of peer review will be used to inform quality judgements and the sub-panel will, where appropriate, be guided by its individual and collective judgements of refereeing standards. The sub-panel emphasises that work need not be published in outlets based overseas in order to be judged as meeting levels of international quality. Conversely, outputs published in outlets based overseas will not automatically be assumed to be of international quality.

17. The listing order of authors on co-authored works will not be taken into account.

18. The sub-panel will take no view about the timing of the publication of research work within the assessment period.

19. The sub-panel will assess pedagogic research in areas within the UOA using the same criteria as applied to other areas of research. Where necessary, it will cross-refer parts of submissions or individual outputs in this area to the Education sub-panel or to specialist advisers for advice.

20. The sub-panel requires departments to use the ‘Other relevant details’ field in RA2 (maximum 100 words) to describe the scholarly, policy or applied impact of the research and to provide justification for the multiple citing of outputs.

21. The sub-panel expects all departments to use the ‘Other relevant details’ field in RA2 only for the purposes listed above. It should not be used to express opinions about the quality of the output. Any information given in comments must be verifiable through the RAE team’s verification process.

22. All types of output will be judged on the basis of the criteria of rigour, significance and originality as defined below. Since the sub-panel does not feel that there are easily identified categories of research, these criteria are not separately defined for different types of research.

a. **Originality** is a characteristic of research which is not merely a replication of other work or simply applies well-used methods to straightforward problems, but which engages with new or complex problems or debates and/or tackles existing problems in new ways.

b. **Significance** will be judged in different ways according to whether the research is basic, strategic or applied. Ways of evaluating the significance of research include judging its effects on the development of the field, examining contributions to existing debates, and assessing its impacts on policy and practice.

c. **Rigour** will be judged in many ways, and can helpfully be associated with methodological and theoretical robustness and the use of a systematic approach. It includes traditional qualities such as reliability and validity, and also qualities such as integrity, consistency of argument and consideration of ethical issues.

23. The sub-panel interprets the quality levels for outputs as follows:

a. **4* – quality that is world-leading in terms of originality, significance and rigour.** This category is for outputs in any form which are at the forefront of research of international quality. Research at this level contributes by generating, for example, new methods, new practices, new theoretical frameworks, new understandings. In such terms, this work will have made (or will be expected to make) a highly significant contribution to its area.

b. **3* – quality that is internationally excellent in terms of originality, significance and rigour but which nonetheless falls short of the highest standards of excellence.** This category is for outputs in any form which are of high quality and which match the standards of international peer reviewed research. Such work will have made (or will be expected to make) a significant contribution to its area.

c. **2* – quality that is recognised internationally in terms of originality, significance and rigour.** This category is for outputs in any form which match the standards of international peer reviewed research. Such work will have made (or will
be expected to make) a recognised contribution to its area.

d. **1* – quality that is recognised nationally in terms of originality, significance and rigour.** This category is for outputs in any form which match the standards of peer reviewed research. Such work will have made (or be expected to make) a limited contribution to its area.

e. **Unclassified – quality that falls below the standard of nationally recognised work. Or work which does not meet the published definition of research for the purposes of this assessment.**

**Research environment**

Research students and research studentships

24. The sub-panel will consider the standard data analyses provided by the RAE team, particularly research masters degrees awarded per staff FTE and doctoral degrees awarded per staff FTE.

25. The sub-panel will take account of data relating to research students, including the source and the volume of research studentships (in total and normalised by FTE), in assessing the quality of the research environment.

26. Departments should disaggregate in RA5 the numbers of students on research doctorates from those on professional doctorate programmes (where the latter are eligible for return). Departments are asked to indicate in RA5 the contribution which students on professional doctorate programmes make to the research environment.

**Research income**

27. The sub-panel will consider the standard data analyses provided by the RAE team particularly income by source per staff FTE and research assistants per staff FTE. The sub-panel will consider this information in the context of evaluating a department’s research environment.

28. The sub-panel will take account of both the volume and source of research income (in total and normalised by FTE) in assessing the research environment. Information about collaboratively funded research work should be provided in RA5.

29. In addition, the sub-panel asks departments to describe in RA5 how their research income supports or facilitates the research of different groups or individuals within the department, giving details about research funding awards by source.

**Research structure**

30. Submitting departments are asked to describe their research structure. They may provide, *inter alia*, the following information:

a. Research groups (where relevant): who belongs to them, their prime activities, how they operate (including in relation to the non-research activities of the unit), their main achievements and, where appropriate, how they are funded.

b. Other UOAs to which related work has been submitted and any difficulties of fit. Submissions should also identify any areas of positive interdisciplinary interaction.

c. Objective data, verifiable through the RAE team’s verification process, evidencing an active and vital research culture.

d. The nature and quality of the research infrastructure, including significant equipment, research facilities, technical support staff and facilities for research students.

e. Arrangements for supporting interdisciplinary or collaborative research work.

31. Where relevant, departments should provide information about relationships with research users within and across departments (including public services, voluntary bodies, industry and commerce), and on the account taken of government policy initiatives and objectives.
Staffing policy

32. Submitting departments are asked to describe their staffing policy. They may provide, *inter alia*, the following information:

a. Arrangements for developing and supporting staff (including contract research staff) in their research, including how this support sits with their non-research duties.

b. Arrangements for developing the research of colleagues new to research and for integrating them into a wider, supportive research culture.

c. Details of how the departure of staff in Categories B and D has affected the strength, coherence and research culture of the department at the census date.

Research strategy

33. Submitting departments are invited to describe their research strategy. They may provide, *inter alia*, the following information:

a. A statement about the main objectives and activities in research over the next five years, including any ongoing research work which is not currently producing visible outcomes. Departments are also invited to provide evidence-based information on the sustainability of the research environment.

b. An evaluation of verifiable developments and progress in respect of any research plans described in the 2001 RAE.

Esteem indicators

34. Departments should list indicators of peer esteem and national and international recognition which relate to the staff submitted. Information provided in this section must be sufficiently clear to be verifiable through the RAE team’s verification process.

35. The submission may give examples (since January 2001) of a maximum of four esteem indicators for each individual researcher listed in RA1, from any one or several of the following categories:

- awards and distinctions
- external doctoral examining nationally and internationally
- invited talks at conferences/keynote addresses/plenaries
- journal editorship and editorial board membership
- peer reviewing of manuscripts and grant applications
- prize lectures
- research-related service on or for national or international bodies or committees
- research-related activities including:
  - conference organisation
  - dissemination such as Public Engagement with Science activities
  - major media coverage of research
  - participation in the development of national and international policy and practice.

36. Departments are also invited to identify in RA5 any indicators of collective esteem for research groups within the department or for the department as a whole.

37. In judging esteem indicators, the sub-panel will take account of the volume and significance across the submission of activities in the listed esteem factors. It will also take account of the individual circumstances and the career stage of submitted staff. There is no expectation of the full range of esteem indicators in the cases of early career researchers, part-time staff, staff who have taken career breaks, or staff for whom special circumstances have been identified.

Applied research and practice-based research

38. In line with the other sub-panels in Main Panel K, the sub-panel has identified consistent indicators of excellence (which are defined in paragraphs 22-23) which are applicable across the whole range of research activity in the UOA
(including applied and practice-based research). Full recognition will be given to applied and practice-based research which is of direct relevance to the needs of the public and voluntary sectors and commerce and industry. The sub-panel’s interpretation of the definitions of quality encompasses applied and practice-based research. In judging the excellence of applied and practice-based research the sub-panel will draw, as necessary, on specialist advice from users on the sub-panel and from other specialist advisers and, where appropriate, through cross-referral to other sub-panels.

**Individual staff circumstances**

39. Departments should note any individual staff circumstances which have significantly affected their contribution to the submission as defined in paragraph 39 of the generic statement.

40. Departments are asked, through RA5b, to explain how any individual staff circumstances have negatively affected that individual’s contribution to the submission (in terms of the quantity of outputs rather than the quality) of that individual.

41. The sub-panel takes the view that the inclusion of researchers at every stage of their career, and evidence of an appropriate attitude to those who have taken career breaks or for whom other special circumstances are identified, are positive indicators in judging the research environment.

**Working methods**

42. The assessment will be one of peer review based on professional judgement. The sub-panel’s assessment of quality will be reached by examining the whole submission at a number of levels. All forms of output will be judged according to the same criteria.

43. Each sub-panel member will read every department’s submission (ie, documents RA0-RA5) in advance of the initial meeting. Preliminary assessments will identify areas within submissions where more detailed consideration is required. The sub-panel will use its collective expertise to form judgements about the quality of individual outputs. All submissions will be examined in detail by two or more sub-panel members, one of whom will take the lead in the subsequent discussion of that submission. The sub-panel expects collectively to examine in detail virtually all outputs.

44. The decision about the recommendation to the main panel of a particular quality level rests with the sub-panel. It is expected that all decisions will be reached by consensus; a vote will be used in the unlikely event that consensus can not be achieved.

45. In establishing an overall quality profile for each submission, the sub-panel will allocate the following percentage weightings: research outputs 70%, research environment 20%, esteem indicators 10%.

46. The sub-panel will build a quality profile for the research environment of a submitting department using various contributory factors including: research income; research students, studentships and training; research infrastructure; staffing policy, strategy and future plans. The 20% of the overall quality profile allocated to research environment may therefore be distributed across different quality levels where there is divergence in the judgements of quality of these different elements. The 10% of the overall quality profile attributed to the esteem indicators of a submitting department will be allocated similarly, taking into account the level and type of the various cited indicators of esteem, and bearing in mind what may be expected of staff at different stages of their research careers.

47. Work developed in two or more UK institutions may be submitted for assessment as a coherent whole. Joint submissions will be assessed in the same way as submissions from single institutions. The sub-panel expects joint submissions to give evidence of active research collaboration.

48. Much of the work which falls within the UOA is, of its nature, diverse, multidisciplinary and interdisciplinary. The sub-panel will refer parts of submissions to individual advisers and/or
other sub-panels as necessary and in accordance with paragraphs 52-55 of the generic statement. The sub-panel is conscious that benchmark standards of excellence may not apply equally to research in new interdisciplinary fields, and will take particular care in assessing interdisciplinary outputs.

49. The main panel will receive all the minutes and, as necessary, the papers of meetings of the sub-panels. Sub-panels will bring worked assessment examples and developing profiles to the main panel meetings. The main panel chair, international members and observers from the main panel will attend meetings of sub-panels as appropriate. Specialist advisers representing the user community will audit claims of significance from submissions across the whole disciplinary range. The main panel will not undertake sampling or cross-referencing.
Annex 1
Quality profiles and definitions of quality levels

Table 1 Sample quality profile*

<table>
<thead>
<tr>
<th>Unit of assessment A</th>
<th>FTE Category A staff submitted for assessment</th>
<th>Percentage of research activity in the submission judged to meet the standard for:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>4*</td>
</tr>
<tr>
<td>University X</td>
<td>50</td>
<td>15</td>
</tr>
<tr>
<td>University Y</td>
<td>20</td>
<td>0</td>
</tr>
</tbody>
</table>

* The figures are for fictional universities. They do not indicate expected proportions.

Table 2 Definitions of quality levels

<table>
<thead>
<tr>
<th>Quality level</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>4*</td>
<td>Quality that is world-leading in terms of originality, significance and rigour.</td>
</tr>
<tr>
<td>3*</td>
<td>Quality that is internationally excellent in terms of originality, significance and rigour but which nonetheless falls short of the highest standards of excellence.</td>
</tr>
<tr>
<td>2*</td>
<td>Quality that is recognised internationally in terms of originality, significance and rigour.</td>
</tr>
<tr>
<td>1*</td>
<td>Quality that is recognised nationally in terms of originality, significance and rigour.</td>
</tr>
<tr>
<td>Unclassified</td>
<td>Quality that falls below the standard of nationally recognised work. Or work which does not meet the published definition of research for the purposes of this assessment.</td>
</tr>
</tbody>
</table>

1. Sub-panels will use their professional judgement to form a view about the quality profile of the research activity described in each submission, taking into account all the evidence presented. Their recommendations will be endorsed by the main panel in consultation with the sub-panel.

2. ‘World-leading’ quality denotes an absolute standard of quality in each unit of assessment.

3. ‘World leading’, ‘internationally’ and ‘nationally’ in this context refer to quality standards. They do not refer to the nature or geographical scope of particular subjects, nor to the locus of research nor its place of dissemination, for example, in the case of ‘nationally’, to work that is disseminated in the United Kingdom of Great Britain and Northern Ireland.

4. The profile for a submission that contains no research which meets the 1* threshold will be 100% Unclassified. A submission that contains no research (that is, no work that meets the definition of research for the RAE) will not be awarded a quality profile.
Building a quality profile

5. Panels are required to consider all the components of the submission when reaching an overall quality profile (see Figure 1). The components equate to the different data collected in the RAE, namely submitted staff information (RA1), research outputs (RA2), research student data (RA3), research income (RA4), and the supporting statement on research environment and esteem indicators (RA5a).

6. These different components will be assessed under three over-arching elements: research outputs, research environment, and esteem indicators. Research outputs (RA2) will always be assessed as one of these three elements.

7. Main panels have decided whether the components of submissions other than research outputs (RA3, 4 and 5) will be assessed under the ‘Research environment’ or ‘Esteem indicators’ element. For example, a panel may consider that research income contributes to the research environment, or that it is a measure of esteem in its subject area. Similarly research student numbers, research student completions and research studentships may either be part of the research environment or an indicator of esteem. Main panels explain in their statements of criteria and working methods their reasoning for assigning components of the submission to a particular element.

8. Main panels have allocated a percentage weighting to each of three elements – research outputs, research environment and esteem indicators – which indicates the extent to which the different elements will contribute to the overall quality profile of a submission. Given the primacy of expert review in the process, the weighting allocated to research outputs must be at least 50% of the overall quality profile: some main panels have decided that research outputs should be weighted more highly. Main panels had to allocate a significant weighting to each of the other aspects (environment and esteem) as they saw fit, but since the quality profile will be defined in multiples of 5%, the minimum weighting in either case will be 5%. Main panels have defined their reasoning in their criteria statements.

The overall quality profile comprises the aggregate of the weighted profiles produced for research outputs, research environment and esteem indicators. The percentage weightings for the three elements are illustrative. Panels should allocate these weightings. The minimum weighting for the research outputs profile is 50%. In this example the overall quality profile shows 15% of research activity is at 4* level. This is made up of 70% x 10 (research outputs), 20% x 20 (research environment) and 10% x 30 (esteem indicators), rounded as described in paragraphs 12-15 below.

Figure 1 Building a quality profile

<table>
<thead>
<tr>
<th>Overall quality profile</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quality level</td>
</tr>
<tr>
<td>% of research activity</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Research outputs</th>
</tr>
</thead>
<tbody>
<tr>
<td>4*</td>
</tr>
<tr>
<td>10</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Research environment</th>
</tr>
</thead>
<tbody>
<tr>
<td>4*</td>
</tr>
<tr>
<td>20</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Esteem indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td>4*</td>
</tr>
<tr>
<td>30</td>
</tr>
</tbody>
</table>

eg 70% (Minimum 50%)

eg 20% (Minimum 5%)

eg 10% (Minimum 5%)
9. Sub-panels will assess research outputs and develop a quality profile for this element. Sub-panels will also assess the evidence within the components of the submission assigned to the research environment and esteem indicators elements, and draw up a quality profile for each.

10. Sub-panels will sum the three weighted quality profiles to develop an overall quality profile for the submission. They will use the rounding methodology described in paragraphs 12-15 of this annex to round the overall quality profile. Overall quality profiles will be published in steps of 5%.

11. Sub-panels will finally confirm that, in their expert judgement, the overall profile is a fair reflection of the research activity in that submission, and that their assessment has taken account of all the different components of the submission.

**Rounding**

12. All sub-panels will adopt a cumulative rounding methodology to ensure that the overall quality profile for any submission will always round to 100%, and to avoid the unfair consequences that simple rounding can produce. They will first sum the weighted quality profiles for outputs, environment, and esteem and then adopt a cumulative rounding methodology.

**Worked example**

13. Using the example in Figure 1, first calculate the initial overall profile, that is, the sum of the weighted profiles for outputs, environment and esteem.

<table>
<thead>
<tr>
<th></th>
<th>4*</th>
<th>3*</th>
<th>2*</th>
<th>1*</th>
<th>u/c</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outputs</td>
<td>10</td>
<td>25</td>
<td>40</td>
<td>15</td>
<td>10</td>
</tr>
<tr>
<td>Environment</td>
<td>20</td>
<td>30</td>
<td>15</td>
<td>20</td>
<td>15</td>
</tr>
<tr>
<td>Esteem</td>
<td>30</td>
<td>25</td>
<td>10</td>
<td>20</td>
<td>15</td>
</tr>
<tr>
<td>Weighted</td>
<td></td>
<td>70%</td>
<td>7</td>
<td>17.5</td>
<td>28</td>
</tr>
<tr>
<td></td>
<td>20%</td>
<td>4</td>
<td>6</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>10%</td>
<td>3</td>
<td>2.5</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Initial profile</td>
<td>14</td>
<td>26</td>
<td>32</td>
<td>16.5</td>
<td>11.5</td>
</tr>
</tbody>
</table>

14. Cumulative rounding works in three stages:

a. The initial profile is:

<table>
<thead>
<tr>
<th>4*</th>
<th>3*</th>
<th>2*</th>
<th>1*</th>
<th>u/c</th>
</tr>
</thead>
<tbody>
<tr>
<td>14</td>
<td>26</td>
<td>32</td>
<td>16.5</td>
<td>11.5</td>
</tr>
</tbody>
</table>

b. Stage 1: Calculate the cumulative totals (for example the cumulative total at 3* or better is 26+14=40).

<table>
<thead>
<tr>
<th>4*</th>
<th>3* or better</th>
<th>2* or better</th>
<th>1* or better</th>
<th>u/c or better</th>
</tr>
</thead>
<tbody>
<tr>
<td>14</td>
<td>40</td>
<td>72</td>
<td>88.5</td>
<td>100</td>
</tr>
</tbody>
</table>

c. Stage 2: Round these to the nearest 5%, (rounding up if the percentage ends in exactly 2.5 or 7.5).

<table>
<thead>
<tr>
<th>4*</th>
<th>3* or better</th>
<th>2* or better</th>
<th>1* or better</th>
<th>u/c or better</th>
</tr>
</thead>
<tbody>
<tr>
<td>15</td>
<td>40</td>
<td>70</td>
<td>90</td>
<td>100</td>
</tr>
</tbody>
</table>

d. Stage 3: Find the differences between successive cells to give the rounded profile. So, for example, the percentage allocated to 2* is the difference between the cumulative total at 2* or better, minus the cumulative total at 3* or better (70-40 =30).

<table>
<thead>
<tr>
<th>4*</th>
<th>3*</th>
<th>2*</th>
<th>1*</th>
<th>u/c</th>
</tr>
</thead>
<tbody>
<tr>
<td>15</td>
<td>25</td>
<td>30</td>
<td>20</td>
<td>10</td>
</tr>
</tbody>
</table>

15. Cumulating totals the other way (rounding down if the percentage ends in exactly 2.5 or 7.5) gives exactly the same answer.
### Annex 2

**Units of assessment and main panels**

<table>
<thead>
<tr>
<th>Main panel</th>
<th>UOA</th>
<th>UOA name</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>1</td>
<td>Cardiovascular Medicine</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>Cancer Studies</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>Infection and Immunology</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>Other Hospital Based Clinical Subjects</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>Other Laboratory Based Clinical Subjects</td>
</tr>
<tr>
<td>B</td>
<td>6</td>
<td>Epidemiology and Public Health</td>
</tr>
<tr>
<td></td>
<td>7</td>
<td>Health Services Research</td>
</tr>
<tr>
<td></td>
<td>8</td>
<td>Primary Care and Other Community Based Clinical Subjects</td>
</tr>
<tr>
<td></td>
<td>9</td>
<td>Psychiatry, Neuroscience and Clinical Psychology</td>
</tr>
<tr>
<td>C</td>
<td>10</td>
<td>Dentistry</td>
</tr>
<tr>
<td></td>
<td>11</td>
<td>Nursing and Midwifery</td>
</tr>
<tr>
<td></td>
<td>12</td>
<td>Allied Health Professions and Studies</td>
</tr>
<tr>
<td></td>
<td>13</td>
<td>Pharmacy</td>
</tr>
<tr>
<td>D</td>
<td>14</td>
<td>Biological Sciences</td>
</tr>
<tr>
<td></td>
<td>15</td>
<td>Pre-clinical and Human Biological Sciences</td>
</tr>
<tr>
<td></td>
<td>16</td>
<td>Agriculture, Veterinary and Food Science</td>
</tr>
<tr>
<td>E</td>
<td>17</td>
<td>Earth Systems and Environmental Sciences</td>
</tr>
<tr>
<td></td>
<td>18</td>
<td>Chemistry</td>
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<tr>
<td></td>
<td>19</td>
<td>Physics</td>
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<td>F</td>
<td>20</td>
<td>Pure Mathematics</td>
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<td></td>
<td>21</td>
<td>Applied Mathematics</td>
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<tr>
<td></td>
<td>22</td>
<td>Statistics and Operational Research</td>
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<tr>
<td></td>
<td>23</td>
<td>Computer Science and Informatics</td>
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<tr>
<td>G</td>
<td>24</td>
<td>Electrical and Electronic Engineering</td>
</tr>
<tr>
<td></td>
<td>25</td>
<td>General Engineering and Mineral &amp; Mining Engineering</td>
</tr>
<tr>
<td></td>
<td>26</td>
<td>Chemical Engineering</td>
</tr>
<tr>
<td></td>
<td>27</td>
<td>Civil Engineering</td>
</tr>
<tr>
<td></td>
<td>28</td>
<td>Mechanical, Aeronautical and Manufacturing Engineering</td>
</tr>
<tr>
<td></td>
<td>29</td>
<td>Metallurgy and Materials</td>
</tr>
<tr>
<td>H</td>
<td>30</td>
<td>Architecture and the Built Environment</td>
</tr>
<tr>
<td></td>
<td>31</td>
<td>Town and Country Planning</td>
</tr>
<tr>
<td></td>
<td>32</td>
<td>Geography and Environmental Studies</td>
</tr>
<tr>
<td></td>
<td>33</td>
<td>Archaeology</td>
</tr>
<tr>
<td>Main panel</td>
<td>UOA</td>
<td>UOA name</td>
</tr>
<tr>
<td>------------</td>
<td>------</td>
<td>----------------------------------------------</td>
</tr>
<tr>
<td>I</td>
<td>34</td>
<td>Economics and Econometrics</td>
</tr>
<tr>
<td></td>
<td>35</td>
<td>Accounting and Finance</td>
</tr>
<tr>
<td></td>
<td>36</td>
<td>Business and Management Studies</td>
</tr>
<tr>
<td></td>
<td>37</td>
<td>Library and Information Management</td>
</tr>
<tr>
<td>J</td>
<td>38</td>
<td>Law</td>
</tr>
<tr>
<td></td>
<td>39</td>
<td>Politics and International Studies</td>
</tr>
<tr>
<td></td>
<td>40</td>
<td>Social Work and Social Policy &amp; Administration</td>
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<td>Sociology</td>
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<td></td>
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<td></td>
<td>43</td>
<td>Development Studies</td>
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<td>K</td>
<td>44</td>
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<td></td>
<td>45</td>
<td>Education</td>
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<tr>
<td></td>
<td>46</td>
<td>Sports-Related Studies</td>
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<td>L</td>
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<td>Music</td>
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Annex 3
Definition of research for the RAE

(Changes in phrasing from the definition used for the 2001 RAE are in **bold**.)

‘Research’ for the purpose of the RAE is to be understood as original investigation undertaken in order to gain knowledge and understanding. It includes work of direct relevance to the needs of commerce, industry, **and** to the public and voluntary sectors; scholarship*; the invention and generation of ideas, images, performances, artefacts including design, where these lead to new or substantially improved insights; and the use of existing knowledge in experimental development to produce new or substantially improved materials, devices, products and processes, including design and construction. It excludes routine testing and **routine** analysis of materials, components and processes **such as** for the maintenance of national standards, as distinct from the development of new analytical techniques. It also excludes the development of teaching materials that do not embody original research.

* Scholarship for the RAE is defined as the creation, development and maintenance of the intellectual infrastructure of subjects and disciplines, in forms such as dictionaries, scholarly editions, catalogues and contributions to major research databases.
Annex 4
Declarations of interest

Major interests

All panel chairs, members, secretaries, observers and specialist advisers are bound by the following arrangements for avoiding conflicts of interest.

1. All main panel chairs and members, sub-panel chairs and members, panel secretaries and assistant secretaries, observers and specialist advisers (hereafter collectively called panel members) are asked to make a declaration of their interests. For the purpose of the RAE, interests are defined as:
   a. The institution(s) at which the individual is employed.
   b. Any institution at which the individual has been employed since January 2001.
   c. Any institution(s) at which the individual has been engaged in substantial teaching or research since the start of the assessment period (1 January 2001); this might include institutions at which the individual has the status of visiting lecturer/fellow/professor or similar.
   d. Any institution(s) at which the individual’s partner and/or immediate family member is employed.

Panel procedures

2. A complete list of the declared interests of panel members and others involved in the assessment will be prepared by the RAE team and made available, in confidence, to panels when they start their work.

3. Individuals will be asked to update the RAE team regularly on any additional interests. Complete lists of declared interests will be updated and circulated accordingly on an ad hoc basis.

4. As a matter of principle, individuals will withdraw from panel meetings when submissions are discussed from the HEIs in which they declare to have an interest. Each main and sub-panel will publish in its criteria statement its protocol for dealing with declared interests, in line with this principle.

Requests for information

5. Panel members are likely to receive numerous invitations to discuss issues concerned with RAE 2008. Although the RAE team seeks improved clarity and transparency during this exercise through the dissemination of information, we do not wish panel members to compromise their position by entering into discussions which could be perceived to give a particular individual or institution an unfair advantage.

6. It is therefore strongly recommended that panel members should not discuss issues concerning individual departmental or institutional submissions. However, they may accept invitations to talk at meetings where a number of different institutions are represented, for example those arranged by a professional body or subject association.

7. If any member has concerns over a potential conflict of interests or the propriety of a proposed action s/he should discuss it with the RAE manager.

8. Panel members are not expected to suspend normal relations with their colleagues and peers during the exercise. They should not feel in any way obliged, for example, to withdraw from external examining, or participation in appointment committees. They are, however, asked to exercise caution in dealings with individual departments, or with subject associations or similar bodies, where there is an actual or clearly inferable connection with their panel membership.

Minor interests

9. The RAE team has also invited main and sub-panels to consider operating a policy whereby panel members declare minor interests on an ad hoc basis, so that they can be minuted in panel meetings and handled on a case by case basis. The following were offered as examples of minor interests and possible methods of dealing with them. They are illustrative and do not constitute an exhaustive or prescriptive list:
   a. Panel member supervises or co-supervises one or more doctoral students from a submitting
institution. Panel member declares this for the panel to note.

b. Panel member supervised a doctoral student who went on to become a research active staff member within a submission made to the panel. Panel member declares this and does not take lead/sole responsibility for assessing the published output linked to that individual.

c. Panel member was supervised as a doctoral student by a research active staff member within a submission made to the panel. Panel member declares this and does not take lead/sole responsibility for assessing the published output linked to that individual.

d. Panel member is co-investigator or co-holder of a grant with the submitting institution. Panel member declares this and does not take lead/sole responsibility for assessing the published output linked to that individual.

e. Panel member is on the editorial board of a journal series published by a submitting department or unit, or has co-organised a conference or conference series with a submitting department. Panel member declares this and does not take lead responsibility for assessing the research environment and esteem indicators element of that submission.

f. Panel member has acted during the assessment period as a member of an appointment or promotions committee for a submitting department or unit, or has provided references for staff members returned in the submission. Panel member declares this for the panel to note.

g. Panel member acts as an external examiner for research degrees for a submitting department or unit. Panel member declares this and does not take lead/sole responsibility for assessing the research environment and esteem indicators element of that submission.

h. Panel member studied at a submitting department or unit before the assessment period. Panel member declares this and does not take lead/sole responsibility for assessing the research environment and esteem indicators element of that submission.

i. A member of the panel member’s wider family studies or works at a submitting department or unit. Panel member declares this for the panel to note.

10. Panels might wish to invite a panel member who declares a number of minor interests in one institution to treat that institution as a major interest.
Annex 5
Confidentiality arrangements

All panel chairs, members, secretaries, observers and specialist advisers are bound by the confidentiality arrangements described in the following letter.

CONFIDENTIAL

Dear

Research Assessment Exercise 2008: Confidentiality arrangements

Purpose

1. This letter sets out arrangements for ensuring that all information contained in RAE submissions made by institutions for the 2008 RAE is maintained and treated confidentially by panels. As for the 2001 RAE, apart from personal data and details of confidential outputs, information from submissions will be published on the internet following completion of the assessment: we expect to publish this early in 2009. The arrangements described below provide for maintaining the confidentiality of all submission information unless or until such time as it becomes freely available in the public domain.

2. The letter also deals specifically with the treatment by panels of any confidential research outputs that may be cited in submissions. Research outputs in the 2008 RAE are defined as publicly available, assessable outputs of research in whatever form. However, institutions may submit for assessment confidential outputs provided they mark them as ‘confidential’ in submissions and make them available to panels.

3. The letter also describes arrangements for ensuring the confidentiality of panels’ discussions about submissions, or other information deduced from or generated as a result of submissions.

4. We have two objectives in placing confidentiality obligations on panel members. Firstly, subject only to any legal obligations on HEFCE to disclose further, we wish to ensure that the starred quality profile awarded to each submission and the brief feedback given in confidence to heads of institutions by the panel via the RAE team stand as the only public comment from panels and their constituent members on any individual submission. Secondly, we aim to discourage parties who are not involved in the assessment process from approaching or placing pressure on panel members to disclose information about the panel’s discussion of particular submissions. In other words, maintenance of confidentiality is essential if panel members are not to be inhibited from expressing their opinions freely in panel discussions, and therefore essential to the effective operation of the RAE as a peer review. In legal terms, a breach of confidentiality by a panel member may, in certain circumstances, constitute a breach of data protection legislation and/or a breach of a common law duty of confidentiality, may give rise to financial losses, or may infringe or impact upon intellectual property rights in research outputs.

5. The obligations set out below will subsist indefinitely.

Obligations on panel members

Information contained in RAE submissions

6. The higher education funding bodies, through the RAE team, collect a range of information from institutions in RAE submissions for the purpose of assessing the quality of research. In recognition of this purpose, you shall use any information which you receive in RAE submissions from institutions only for the purposes of carrying out your functions as a panel member.

7. You shall not make copies of such information except as is necessary to carry out your function as a panel member. You shall destroy, or return to the RAE manager, originals and any copies you may make of such information, as soon as they are no longer needed for that function or on the request of the RAE manager, whichever may be sooner. This provision applies equally to paper copies or those stored in electronic or other non-paper formats.

8. You shall not disclose the information received to any other person except your fellow panel members and panel observers and secretaries. You

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1 In this context, ‘panels’ refers both to main and sub-panels. The same arrangements for ensuring confidentiality will apply, so far as they are relevant, to chairs, members, observers and secretaries of main and sub-panels and to specialist advisers.
shall take all reasonable steps to ensure that other people cannot have access to the information, whether held in paper or electronic copy. In particular, it is important to remember that computer systems and specifically e-mail are not necessarily secure, and you agree to exercise appropriate caution when using them. Full guidance on the storage and transmission of RAE information will be included in the guidance to panels which will be provided to panel members and made publicly available in January 2005.

Confidential research outputs

9. Confidential research outputs will be indicated as such in submissions and will clearly be marked ‘confidential’. You shall treat as confidential all such information, including the research outputs themselves and details of their sponsors or commissioning organisations. Even if you personally consider that the designation ‘confidential’ may be wrong, you agree to accept any designation of confidentiality which an institution has placed upon part or all of its submission. If you feel in a particular case that this inhibits you from carrying out your function as a panel member, you should raise the issue with the RAE manager who will be able to provide or seek advice.

10. An institution’s submission may contain material which is patented or patentable, which is subject to other intellectual property rights, which is commercially sensitive, or which the interests of the institution and/or its researchers require to be kept confidential or given a restricted circulation. Institutions make submissions to the RAE on the understanding that their position in these regards will not be prejudiced by the fact of submission. You shall respect and honour that understanding and act accordingly. You are in particular reminded of the danger of ‘prior disclosure’ in the case of potentially patentable material, and the paramount need therefore to respect the confidentiality of such material.

Discussion about submissions and information deduced from submissions

11. You agree that you shall restrict your discussion of submissions and of research groups described within submissions to panel meetings and to related dialogue between yourself, the RAE team, panel secretary and assistant secretary and members of the main and sub-panels with which you work. You shall not discuss with anyone who is not involved in the assessment process, as described above, either the submission or the assessment of an identifiable institution or group of institutions whose individual members could be identified, still less the work of individual researchers named in submissions, even if ostensibly anonymised. You may, of course, comment on the process and conduct of the 2008 RAE in general terms. If you are at all unsure as to what is covered by ‘in general terms’ you should seek advice from the RAE manager.

12. Nothing in this agreement prevents you from disclosing information after it becomes freely available in the public domain (without the breach of any obligation of confidentiality), or which you are required by law to disclose, or which was already known to you and not subject to confidentiality obligations before being disclosed to you in the context of the RAE. It would be prudent, however, to contact the RAE manager in advance to discuss any possible disclosure. Some information provided to or generated by RAE panels may be disclosable under the Freedom of Information Act 2000. However, if you receive any request for information which falls or may fall under that Act you must pass it to the RAE manager for consideration and action, and you should not respond to such requests yourself. If you are in any doubt with regard to any issue of confidentiality, either in general terms or in relation to a particular piece of information, you should seek advice from the RAE manager or, following completion of the RAE, the Director (Research and Knowledge Transfer) at HEFCE.

13. Acceptance of these confidentiality obligations is a condition of your appointment as a panel member. The four higher education funding bodies reserve the right to amend the membership of RAE panels in the event of any breach of the confidentiality obligations on panel chairs and members.
Annex 6
Word limits for RA5a, RA5b and RA5c and RA2 ‘Other relevant details’ field

RA5a

The maximum word count for the textual commentary section (RA5a) will vary based on the number of Category A FTE staff in the submission as follows:

<table>
<thead>
<tr>
<th>FTE Category A staff</th>
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<tbody>
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<td>12,000</td>
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<tr>
<td>Over 90</td>
<td>12,750</td>
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</tbody>
</table>

Note that these word counts equate to at least the page limits per FTE used in the 2001 RAE for RA5 and RA6 combined.

RA5b and RA5c

For all UOAs, RA5b (individual staff circumstances) and RA5c (information concerning Category C staff) will be a maximum of 300 words per researcher.

Institutions should refer to the generic statement and to each sub-panel’s statement of criteria and working methods for further advice about the information to be returned in each case.
### RA2 ‘Other relevant details’ field

Each sub-panel has set a maximum word limit for the ‘Other relevant details’ field in RA2. Please refer to the appropriate sub-panel statement for details of the information required in this field.

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Annex 7
Standard data analyses for all sub-panels

The following data analyses will be available to sub-panels for each submission (and a total for each UOA).

1. Headcount number of research-active staff, by category.
2. Full-time equivalent (FTE) number of research-active staff in Category A.
3. Headcount number of research-active staff in Categories A and C together.
4. Headcount number of research-active staff in Categories A, B, C and D together.
5. Headcount number of research-active staff in Categories A and C together, with each of 0, 1, 2, 3, and 4 outputs submitted for assessment (five separate totals).
6. Headcount number of research fellows.
7. FTE number of research fellows.
8. Total number of outputs submitted for assessment.
9. FTE research assistants (from RA1).
10. FTE research assistants (from RA1) per FTE research-active staff.
11. FTE research students (from RA1).
12. FTE research students (from RA1) per FTE research-active staff.
13. FTE research students (from RA3a).
14. FTE research students (from RA3a) per FTE research-active staff.
15. Median FTE number of research students (from RA3a) per FTE research-active staff.
16. Number of doctoral degrees awarded, by year.
17. Number of doctoral degrees awarded, by year, per FTE research-active staff.
18. Number of doctoral degrees awarded, by year, per FTE research student (student numbers taken from RA3a).
19. Number of masters degrees awarded, by year.
20. Number of masters degrees awarded, by year, per FTE research-active staff.
21. Number of new studentships (total across all years), by sponsor.
22. Number of new studentships (total across all years) per FTE research-active staff, by sponsor.
23. Number of new studentships (total across all years) per FTE research student (student numbers taken from RA3a), by sponsor.
24. Median number of new studentships (total across all years) per FTE research-active staff (total across all sponsors).
25. Research income (total across all years), by source.
26. Research income (total across all years) per FTE research-active staff, by source.
27. Median value of research income (total across all years) per FTE research-active staff (total across all sources).

There will be two separate sheets of figures: one in which figures per research-active staff will use FTE Category A staff numbers; and another in which figures per research-active staff will use headcount Category A plus Category C staff numbers.

These analyses are in addition to the standard listing of data and information presented to panels in RA1 to RA5.