Making Sense of the RAE 2008 Star Ratings

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December 14, 2004

1 Introduction

In their document "RAE 2008 : Initial decisions by the UK funding bodies" (www.rae.ac.uk/pubs/2004/01/), the RAE 208 team say that the rating scale used in RAE 2001 will be replaced by a quality profile based on "the proportion of work in each submission reaching each of four 'starred' quality levels". The levels are named as: four star, three star, two star and one star plus unclassified, but no further details are given of what these levels mean.

The most thorough investigation of the implications of this decision is given in in a series of documents, globally entitled "Reconciling RAE 2001 with RAE 2008" by Stuart McLeay of the University of Wales at Bangor. He says

"In terms of the rating system to be applied in future, it is expected that the highest level (four stars) will be equivalent to the top half of the research that was considered to be at the international level in RAE 2001, whilst three star research will correspond to the bottom half of international, and one and two star research will cover the work classified before as reaching national levels of excellence."

Additionally, a number of institutions, including our own College of Science and Engineering, are assuming that these ratings will be applied at the *individual* level. This is still an assumption. In 2001 the CS Panel applied its ranking at the research group level, and from personal conversations I believe most of the members of that Panel would prefer to do that in 2008, were they to be on the 2008 Panel, which it is likely that many of them will be.

However, in preparation for whatever RAE 2008 throws up, I think it is useful to try to flesh out what these ratings might mean. In particular, it will be essential to do so to satisfy the demands of College, *etc* for a predictive classification of our staff. Below I attempt to do that for each of the five ratings. I am assuming that an overall rating for an individual might be based on three factors: their submitted publications, their research leadership and their esteem indicators. These assumptions are based on my experience of RAE 2001. I have also adopted, in the absence of any published details about the RAE 2008 mechanism, the mechanism used in RAE 2001, e.g. four nominated publications, a short list of esteem indicators, *etc.*

It is unlikely that any individual will fall neatly into any of the descriptors given below. Classifying someone will be a matter of finding the best fit with the least amount of deviation.

This document is put forward to stimulate discussion and feedback, rather than pretending to be authoritative. It is based only on my personal experience and needs to informed by the experiences of others. I will keep developing it as a living document as I gather feedback, unless that feedback is so negative or the RAE 2008 mechanisms turn out to be so antithetical to its assumptions, that I decide to abandon it altogether.

2 Four Star Rating

According to the estimates in table 5 of the Stuart McLeay document, an RAE 2001 5^{*} CS department might expect about 38% of its Cat A/A^{*} staff to be at four star level. His corresponding estimates for 5 and 4 rated CS departments are 26% and 9%, respectively.

2.1 Four Star Publications

I expect that the nominated publications of a four star individual will each be one of the following types: papers in top journals and conferences in the field, research monographs, tutorial papers in handbook of field, keynote talks or best papers from major international conferences, influential standards definitions, patents making major technological impact.

2.2 Four Star Research Leadership

I expect that a four star individual will be a leader of a research group whose research is making a significant impact, either academically or industrially. The size of the group will vary according to the field: experimental areas usually requiring larger groups to have a critical mass. S/he will usually be in a promoted post, will have an average of at least one PhD a year, will be principal investigator on several research grants supporting at least one RA each, and will be a research leader at both national and international level (see esteem indicators in §2.3).

2.3 Four Star Esteem Indicators

I expect that a four star individual will have several esteem indicators of the following types: editor in chief of a major journal or book series, keynote talk at a major international conference, general or programme chair of a major international conference, major award or prize, fellowship of major learned society or professional body, leading officer of a major research-based organisation.

3 Three Star Rating

According to the Stuart McLeay estimates, both an RAE 2001 5^* and 5 CS department might expect about 27% of its Cat A/A* staff to be at three star level. His corresponding estimate for a 4 rated CS department is 15%.

3.1 Three Star Publications

I expect that the nominated publications of a three star individual may include the types listed under four star publications §2.1, but will also have a significant element of: papers in lower ranked journals, conference papers, book chapters based on selected conference papers, minor standards definitions, patents that have yet to make an impact.

3.2 Three Star Research Leadership

I expect that a three star individual will be either the leader of a more minor research group than for a four star individual or will be playing a key supporting role within a four star group. S/he will often be in a promoted post, will have at least one PhD student, will be principal investigator on at least one research grant supporting an RA, possibly a co-investigator on some other grants, and will be active in research leadership at a national and possibly an international level.

3.3 Three Star Esteem Indicators

I expect that a three star individual might have one or two esteem indicators of the type listed in §2.3. But they will have many esteem indicators of the following types: member of editorial board of major journal or book series, invited talk at a minor international conference or workshop, best paper prize, member of programme committee at major conference, referee of journal/conference papers or grant proposals, organiser of minor conference/workshop, research seminars at other departments or laboratories, external examiner for PhD.

4 Two Star Rating

According to the Stuart McLeay estimates, an RAE 2001 5^* CS department might expect about 24% of its Cat A/A* staff to be at two star level. His corresponding estimates for 5 and 4 rated CS departments are 42% and 41%, respectively.

4.1 Two Star Publications

I expect that the nominated publications of a two star individual may include the types listed under four and three star publications §2.1, §3.1, but will also have a significant element of: minor conference or workshop papers, unpublished technical reports.

4.2 Two Star Research Leadership

I expect that a two star individual will be an active member of a research group. S/he will normally not be in a promoted post, will have at least one PhD student, and will be a principal or co-investigator on at least one grant supporting an RA.

4.3 Two Star Esteem Indicators

I expect that a two star individual will have a few esteem indicators of the type listed in §3.3.

5 One Star Rating

According to the Stuart McLeay estimates, an RAE 2001 5^* CS department might expect about 11% of its Cat A/A* staff to be at one star this level. His corresponding estimates for 5 and 4 rated CS departments are 31% and 49%, respectively.

5.1 One Star Publications

I expect that one star individual might have difficulty nominating a full complement of publications and that those nominated would be mainly of the types: minor conference or workshop paper, unpublished technical report.

5.2 One Star Research Leadership

I expect that a two star individual will be an active member of a research group. S/he will normally not be in a promoted post, and may be a principal or co-investigator on a grant *not* supporting an RA, e.g. a travel grant for a few £ks.

5.3 One Star Esteem Indicators

I expect that a two star individual will have at most one or two esteem indicators of the type listed in $\S3.3$.

6 Unclassified

According to the estimates in table 5 of the Stuart McLeay document, an RAE 2001 5* CS department might expect none of its Cat A/A^* staff to be unclassified. His corresponding estimates for 5 and 4 rated CS departments are 7% and 6%, respectively.

The typical unclassified individual would not be research active so would have no publications, evidence of research leadership or esteem indicators.

7 Conclusion

In this document I have proposed some features to help in classifying Cat A/A^* staff submitted to RAE 2008 on their point rating scale. It will be essential to have some such definition in order to make sense of the RAE 2008 classification in preparation for the assessment. However, this is just my initial view based on my previous experience. I would welcome constructive criticism, feedback and suggestions to improve this document.