

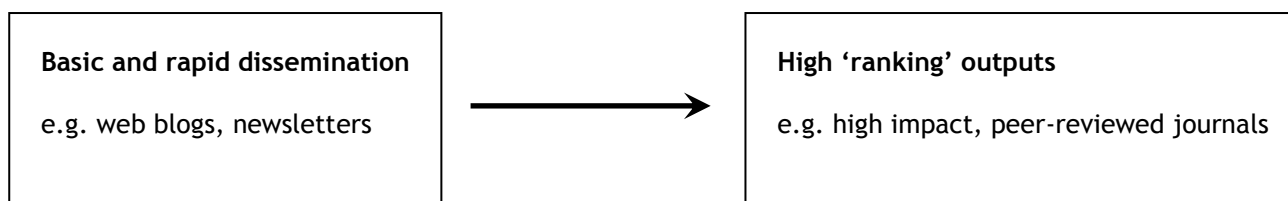
Centre for Bioscience
Pedagogic Research in the Biosciences, University of Leicester, March 24th 2009
Discussion group for 'Evaluating Ped-R'

Convenors - Jon and Mark

The first discussion included consideration of difficulties with deciding if the research had 'worked' and then whether it was good or bad research. This aspect was left undeveloped (and is not described further here).

1. Producing quality outputs.

Some colleagues felt that some people were over-ambitious about the quality of output (e.g. journal type) that the work was suitable for. It was suggested as bad practice to submit very basic/raw articles based on little information to journals just to get referees comments. For example, conclusions drawn from basic studies with very small sample sizes, not well fitted to a theoretical framework, etc. This was tempered with a philosophy to try to disseminate as much as possible where relevant. It was suggested that there was a wide spectrum in terms of both the quality of Ped-R and of the vehicles to disseminate this information. Examples included:



It was noted that quality was not only related to sample sizes (although they are important in studies) and that this may be a subtle difference between (our experiences of) educational and bioscience publications. It was noted that the value of qualitative research and discourse about educational theory were certainly of importance to the quality of (some) Ped-R.

2. Where to publish?

Informed selection of medium to disseminate ('publish') Ped-R was suggested as best founded on a familiarity with the literature. In addition to aligning journal subjects/styles/article types this was also to provide (and demonstrate to referees if necessary) the usual underpinning knowledge of the subject area (e.g. educational theory). Researchers were advised to 'start small', with in-house L&T journals and other rapid (e.g. online) media. This could lead to better connectivity with like-minded researchers.

3. Strategies for developing Ped-R

Individuals and institutions (e.g. universities, HEA Subject Centres) should have long term strategies. One aspect was the recognition and increased value afforded to Ped-R publications within institutions (considered to be virtually non-existent at present). Institutions need to develop new metrics in line with impact factors that would add weight to strategies to enhance the quality/amount of Ped-R research at a local level and beyond.

4. Importance of collaboration for Ped-R in the Biosciences

The role of collaboration between colleagues to carry out Ped-R was suggested as crucial to enhancing the possibility of future successes in this area.

This was suggested as central to:

- Discussing thoughts and Ped-R literature/practices
- Sharing data (maybe for meta-analyses but there was caution about inappropriate uses of meta-analyses for evaluating combined effects of studies with slightly different methods/methodologies etc) and experiences.
- Increasing the degree to which findings can be generalised across the UK
- Reducing the feeling that you have to produce a straightforward 'happy story' with demonstrable significant, positive effects. Bigger, multi-institutional studies findings (e.g.) no effects may be better received than from a small, local study.
- Exploration of the issues and findings from many angles and colleagues. This will inform the publications and also all co-researchers (particularly if the research team has many strengths (e.g. in educational research, sociology, psychology etc.).

This led to discussion of the potential for a database of Ped-R interests and expertise in the Biosciences and also colleagues from other disciplines who have an interest in collaborating with bioscientists. There was debate about the usefulness vs resources invested in this approach.

5. Final comments

Further discussion included questions as to whether bioscientists were as successful at Ped-R compared to colleagues in other subject centres (with the obvious exception of Educational centres). If so - was it because **we needed to strengthen (or make more appropriate) our experimental/ methodological/theoretical/ philosophical bases to studies** and the style in which we report them (as opposed to classic reductionist/positivist approaches following on from the morning talks)?

It was felt **'educationalists' (Ped-R journal editors etc.) should be invited to these events** in addition to the (very useful) input of the sociological/qualitative practitioners in the event today.

It was underlined that a key outcome of this event should be **to devise collaborative projects with the Bioscience community and apply for significant funding streams to develop them.**