

INNOVATION IN PEER REVIEW

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EPSRC

Engineering and Physical Sciences
Research Council

Oxford, 9 November 2010



PERCEPTIONS: WHAT'S WRONG WITH PEER REVIEW?

- Closed shop/old boys network
- `Hidden` bias
- Only supports the current paradigm



WHAT IS PEER REVIEW?

Asking experts for their advice, opinion and judgement to enable decisions to be made.

INGREDIENTS

- Entry conditions – who?
- The information they supply – how?
- Questions posed – what are the criteria?
- Who reviews?
- How do they review?
- Right to reply

Design of process depends on objectives

Traditional model

Who? Open to all

How? Formal written application

Criteria? Quality/impact/management/resources/track record

Who reviews? Other academics

How do they review? Written anonymous statement

Reply? Investigator two-page response

This is only one way!

Who can apply?

- Can set eligibility rules:
 - Career stage/experience
 - Institution
 - Make up of team (multi-disciplinary)
 - Involvement of stakeholders
- Can set limits on numbers:
 - Caps by institution
- Can limit by research area
- Can limit by research type e.g. equipment, travel, networks

Applications

- Expressions of interest
- Outline proposals
- Full case for support
- “job application”
- Anonymity
- Presentation/`pitch`

Questions/criteria

- Quality
- Transformative potential
- Personal qualities
- Relevance to users/application
- Strategic fit
- Right ingredients/recipe:
 - Team, collaborators, infrastructure, plans
- Ethical considerations

Who answers the questions?

- Peers:
 - `Competitors` - technical experts
 - Tangential experts
- Home versus overseas
- `Big wigs`
- Stakeholders/users
- Public

How answers are sought

- Paper-based:
 - Anonymous
 - Named
- Interview
- Presentations and feedback/discussion
- Co-creation

Right to Reply

- Paper statement
- Interviews/discussion

Pre-Peer Review

- Influencing the quality of what you receive
- Workshops:
 - Consensus/agenda-setting
 - Team-/consortia-building
 - Briefing
- Creativity@Home:
 - Creativity, facilitation

Examples: Sandpits

- Topics:
 - Multi-disciplinarity
 - Problem-focus
 - Paradigm-shift
- Open call for expressions of interest
- Two-page application form
- Focus on:
 - person's attitudes and experience
 - mix of backgrounds/experience
- Director and mentors
- Real-time peer review:
 - Co-creation
 - Stakeholders

Examples: Big Pitch

Two pilots:

- Manufacturing and Chemistry
- Small feasibility projects – high levels of novelty

- Open call
- Anonymous outlines
- Focus on idea from an individual:
 - Transformative
 - Risky
- Panel:
 - From general area
 - Academics and industrialists
- Presentation (`pitch`) followed by discussion

Examples: Dream Fellowships

- Aim: to give key individuals `time off` to think about new research directions
- Nominations followed by invitations to apply
 - Validation
- `Job application`
 - Supported by letter from university
- Focus on quality of individual and their intentions
 - NOT a research programme
- Panel with international membership
- Interview

Currently being piloted

Examples: collaborative peer review

- Calls for proposals in specific areas
 - Multi-disciplinary challenge
 - User-focus
- Normal applications
- Reviewers covering the range of disciplines
 - Paired
 - Asked to prepare a joint review

Lessons learnt:

- Process challenging
- Need to enable/be proactive
- Further trials, exploring the use of technology

Core Criteria & Questions

EXCELLENCE	<ul style="list-style-type: none">• Novelty, relationship to the context, and timeliness• Ambition, adventure, and transformative aspects• Appropriateness of the proposed methodology
IMPACT	<ul style="list-style-type: none">• Extent to which the proposal shows the potential impact• Relevance/appropriateness of any beneficiaries or collaborators• Appropriateness of dissemination and knowledge exchange routes and resources
ABILITY TO DELIVER	<ul style="list-style-type: none">• Appropriateness of the track record of the applicant(s)• Balance of skills of the project team, including academic collaborators
PLANNING AND RESOURCES	<ul style="list-style-type: none">• Effectiveness of the proposed planning & management• Appropriateness of the requested resources – justified?

