



Science and Engineering and Researching Change

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A two part project:

Sizeable empirically based research project to scope engagement activities, barriers, motivations, benefits at individual and system levels

Development and research programme over 15 months, 17 universities and 26 academics, real time engagement work and exploring how it might be embedded within universities



Headlines - The Empirical Study

118 interviews scientists and engineers, 21 pvcs and operational managers, 52 universities.

13 individuals not engaged. 3 universities not engaged.

High volumes of engagement - stimulus policy/funding.

Defining engagement - 3 categories – a continuum.

Differences in institutional/subject drivers.

Impacts of difficulties with definitions - individual and institutional insecurities; metrics; evaluation; persuasion of the others [Royal Society '06 Factors].

Discrepancies - motivations/interests and actualities - differs from Wellcome's '00 Role in Public Debate.



More headlines...

Changes in engagement practices over time

Benefits – academics, students, technicians and wider communities

Barriers – back to the BA 2004 conference, Royal Society Reports '06 Factors and Science and the

Public Interest – importance of rewards, support from funders, training, media fears

Emergent themes led to Phase 2 research and development issues



Phase 2

Meta questions: Engagement, Change in Universities and the process of learning

Specific questions: diverse groups, evaluation, sustainability and two way engagement

The format: 2 groups, 4 sets, 4 meetings, additional meetings (eg communications training – Factors 06 Role of Scientists '00)

Concepts: Culture, Change, Agency

Skills: Action and reflection; communication

Delivery: Action Learning, process consultancy, transformative learning events



Outcomes - Individuals

Confidence and esteem - networked and sharing experiences and practices - evidence for arguments, confidence to open conversations

Strength - experience of alternative “virtual organisation” self-revelations and common ground

Impacts of action learning and conceptualisations of change, reading under the surface - personal authority, responsibility, autonomy

National project - legitimacy and use of leverage; project/site visits

Mastery - reflection on engagement & role, taking action and pride

Leadership roles - within organisation; international events

Analytic thinking - the organisation, cultures and how they work



Outcomes - Institutional

Rewards - promotion, prizes

Recognition - administrative support, engagement counts

Training - staff, students, researchers, ESOL and engagement

Home page - institutionalising it

Audits

Departmental sharing of responsibilities – asking and organising

Research bids

Chairing and rebranding committee function