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Industry-HEI engagement through a knowledge exchange: Issues emerging
Presentation overview

- **Introduction: Drivers of knowledge exchange**
- **Construction Knowledge Exchange:**
  - Aims & activities
  - Research methods/ evidence base
  - Results
  - Propose a more sophisticated evaluation framework
- **Two paradigms of knowledge**
- **Implications for CKE**
Drivers of knowledge exchange

- Government perceives UK science base as second only to US, in global terms
- ‘Third leg’ funds supporting exploitation of HEI specialist knowledge
- All organisations to increase, and demonstrate, the economic and social impact of investment in the knowledge base
- Construction has much to gain
Construction Knowledge Exchange

Aims

- Supports teaching & learning by enabling knowledge flow into partner universities from industry
- Supports industry by enabling knowledge flow out from universities to business
Construction Knowledge Exchange: Activities

- Collaborative research projects
- Enterprise consultancy agreements
- Enterprise awareness events for HEI staff
- Training in enterprise for HEI staff
- Assist SMEs in innovation
- Staff secondments into & out of HEI
- Establish Innovation Circles
- Industry/HEI forums
Research methods/ Evidence base

- Signed forms document the activities and provide some initial evaluation
- Business Assists – tick-box questionnaires
- Innovation Circles – more qualitative evidence
## Business Assist Results:
### Business assistance ratings

<table>
<thead>
<tr>
<th>Rating</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Excellent</td>
<td>15.5%</td>
</tr>
<tr>
<td>Very Good</td>
<td>12.1%</td>
</tr>
<tr>
<td>Good</td>
<td>15.5%</td>
</tr>
<tr>
<td>Fair</td>
<td>1.7%</td>
</tr>
<tr>
<td>Poor</td>
<td>0%</td>
</tr>
<tr>
<td>No response</td>
<td>55.2%</td>
</tr>
</tbody>
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- **Positive results?**
- **Lack of response?**
- **Meaning?**
Business Assist Results:
Effect on role in the workplace

• 32.8% of people reported the assistance would affect their role at work
• 60.3% of people did not respond to the question
Management Services division of a large, multidisciplinary engineering practice

“Participant A had reviewed other process tools as potential vehicles for the system. Currently all have been dismissed apart from x, as this seems to be the only tool able to perform fundamental tasks. Participant A is seeking technical support from Microsoft to confirm that other software cannot perform these tasks, thus ruling them out. She also compiled a successful bid for new work.”
Assistant Business Development Manager:

“Facilitated by the Innovation Circle, we’ve delivered the System on time and it has been well received. The Innovation Circle was a useful way of maintaining the momentum of the task. Having a facilitator helps focus the mind and the action points provided structure. It was a good discipline to have.”
Methodological issues arising

To better understand whether what we’re doing is effective, we can examine the rationale for doing it.

– *Why* ought it to work?
– *How* should it work?
– How is it working *in practice*?
Evaluation: a possible framework

• Scientific paradigm of knowledge
  – Knowledge “is a reified object, capable of being packaged up, owned and passed around” (Hall and Quintas, 2003)

• Social Constructionist paradigm of knowledge
  – Knowledge, or ‘knowing’, is conceptualised as a social process; knowledge ‘transfer’ is conceptualised as ‘sharing’ (McAdam and McCreedy, 2000; Hall and Quintas, 2003)
By extension:

• Within scientific paradigm, broadcast tools and techniques suitable for KE. Narrowcast techniques are suitable, but cost effectiveness questionable.
• Within social constructionist paradigm, broadcast tools unsuitable for KE; narrowcast techniques enable genuine learning with substantial impact.
Implications for CKE:

• Re-examination of aims & objectives of CKE
• Development of new ways of demonstrating the extent of KT during an ‘event’ (& substantiating the role of the CKE in fostering business improvement through Innovation Circle)
• As KE practices mature, anticipate pressure to extrapolate to generate testable hypotheses and generic theories of KE