

Embedded evaluation



Natacha Wilson
Geraint Wyn Story

Researcher Development Programme
University of Cambridge

Welcome and introduction

“How embedded evaluation can secure the future of resource intensive researcher development programmes by enhancing: participant learning; course development and impact reporting.”



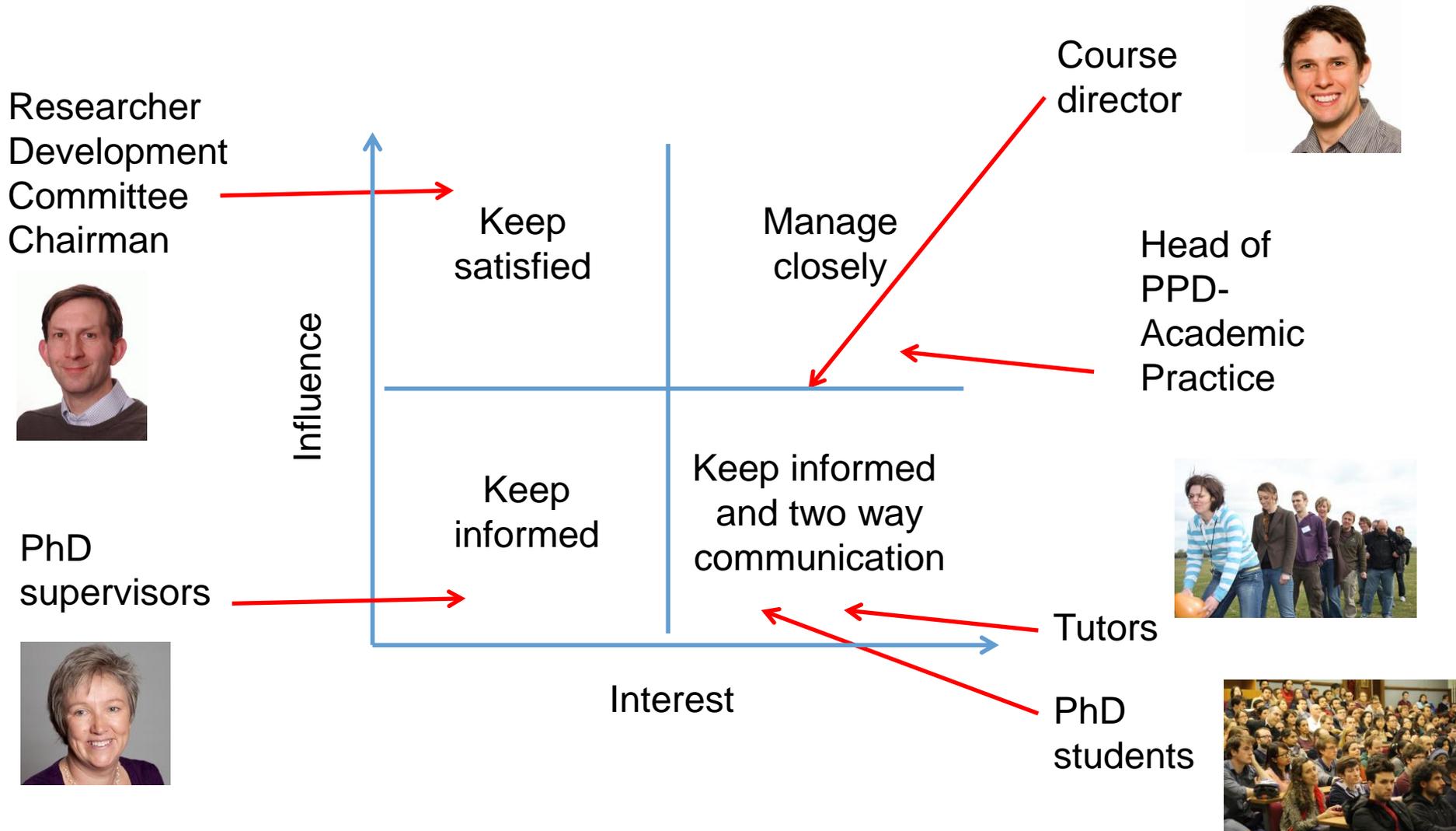
Resource intensive programmes

Most universities run at least one resource-intensive researcher development course per year (time, money, commitment)

Cambridge Local GRADschool is an example

- Twice per year
- Multi-days, residential
- Reaches 200 students pa (population 6000)
- 10% of PhD population
- 10% of annual budget
- 106 days (Cambridge staff time)
- Excellent reputation amongst PhDs and staff
- Pool of external and internal tutors

Stakeholders influence and interest map



Problem #1: justifying growth and worth

Strategic decisions:

1. Meet demand (increase number of available places)
2. Maintain quality and relevance
3. Budget restrictions
4. Fit with overall provision

How do you manage this when key stakeholders have “high influence” but “low interest” in the course?

Activity

Take the role of one of the stakeholder groups:

- Researcher Development Committee Chair
- Head of Department (Researcher Development)
- Course director
- PhD students/researchers
- PhD supervisor

Now spend 5 min coming up with as many pros and cons to GRADschool (or equivalent) as you can, from the view point of your stakeholder group.

Solution #1

To secure the future of GRADschool we need to provide evidence of

- Course benefits (learning)
- Impact on researchers

This can be provided through evaluation

Problem #2

Evaluating the impact of researcher development initiatives is not simple.

Activity

- Join your stakeholder group
- Discuss the challenges of evaluating the impact of a course like GRADschool (resource intensive, multi-day, residential)

3 Myths about Evaluation

1. Evaluation is a complex science and it takes too much time – we don't have the resources.
2. There's a 'right' way to do impact evaluation.
Unfortunately, everyone seems to have a different view on this! How do I get it right?
3. Funders may never read my report.

Solution #2: A New Approach to Evaluation: *“the power of embedded evaluation”*

- Embedded in the course design, learning (– not an add-on)
- Evaluation Associate (funded)
- Purposes:
 1. to assess the impact on researchers
 2. to use evaluation as a way to reflect on researchers' experience
 3. to further improve course design
 4. to communicate key findings to a range of stakeholders
 5. to be able to justify budget

**Placing researchers
at the heart of the evaluation process**

Sharing our experience

1. Six key insights
2. Practical examples
 - GRADschool embedded impact evaluation
3. Your chance to share what happens in the context of your institution and how to overcome challenges

Key Insight # 1 : Engage with stakeholders

- Identify your key stakeholder groups
- Start early (at design stage ideally)
- Stakeholder mapping
 - Impact and Influence
 - Prioritise
- Communicate
 - Be aware of preferences (message and medium)

Stakeholder Engagement: practical examples

- Engaging with
 - PhD students
 - Supervisors
 - Researcher Development Committee
- Vitae
 - Impact Evaluation Group (IEG)
 - Connections (Sheffield)
 - Vitae Conference (UCL)
- Meeting with other tutors
- Benchmarking
 - Oxford and Imperial – regular meetings

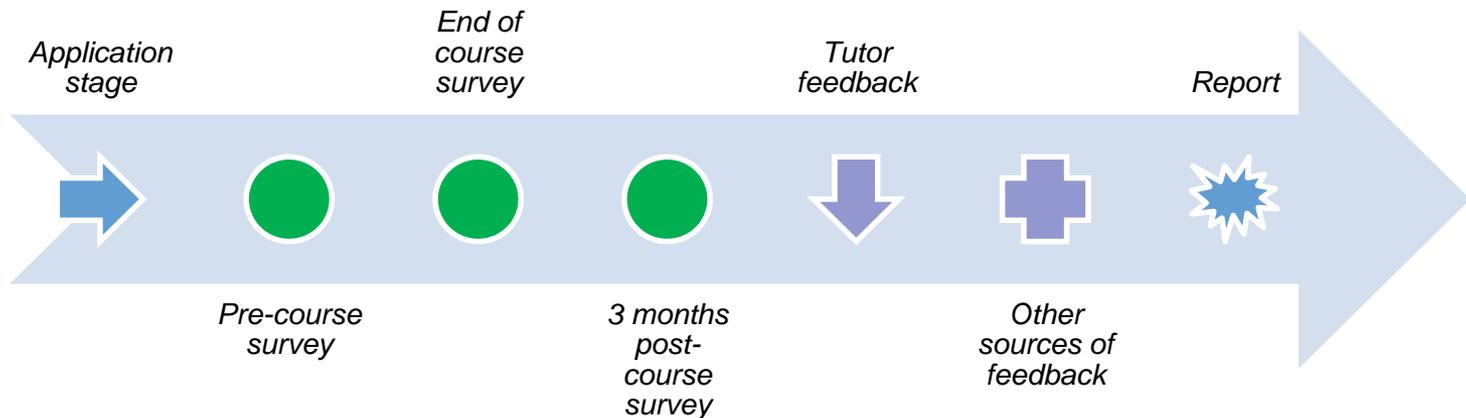
Key insight #2 – Communicate your Approach to Evaluation

- Good Evaluation Method (GEM: Grant 2010)
 - **Modest:** knows what it's trying to do
 - **Ethical:** attends to issues of consent, anonymity and influence
 - **Economical:** right size for purpose, does not collect data that won't be used
- What will you do with the data? Who will you help?
 - Inform academic practice?
 - Feedback in to your RD initiative?
 - Be included in a wider review, annual report?
 - Make sure to communicate the intent and approach to your key stakeholders

Key insight # 3: maximise researchers' development experience

Our solution:

- embed evaluation with design to maximise the development/learning of researcher
- provide an opportunity to reflect on learning and experience



Activity : topics for evaluation

- Which questions would you like answered?
- What matters to you? How will the data help you in your role?
- From your perspective, which level(s) of impact are you interested in?

Impact Framework	Explanation
Level 0	inputs(design time, costs...) and throughputs (number and types of workshops...)
Level 1	the reaction of participants(satisfaction levels)
Level 2	change in attitudes, improve knowledge and/or increase skill
Level 3	changes in behaviour
Level 4	has the quality of the research improved? Has the researcher been able to reach specific goals? (e.g. successful job application or grant application etc...)

Key insight #4 Choose your levels and topics of evaluation

Focus	Impact Framework (levels)	Timing of survey Pre/Post/3mths
Satisfaction (venue, tutors, learning goals, course component)	Reaction (1), Learning (2)	Post, 3 mths
Self-efficacy, self-reflection (teamwork, communication skills, career management skills, overall – completing phd, overall – future)	Learning (2), Behaviour (3)	Pre, post and 3mths
Commitment and outcomes (e.g. intent to change, specific changes or outcomes)	Behaviour (3) and Impact (4)	Pre, post and 3mths
Profiling data (gender, Phd Year, Discipline/school , tutor group)	Level 0	Pre, post, 3mths
Communication & Motivation	Level 0	Pre
Open feedback	Across levels	Pre, post and

Spend time on survey design

1. Make sure each question is clear
2. Include all possible answers (appropriate scale)
3. Do not use leading questions or jargon
4. Be sure each question asks about a single topic
5. Avoid difficult recall questions
6. Keep a good balance between closed and open-ended questions
7. Put difficult and personal questions toward the end of the survey
8. Always proof your questionnaire for question routing (flow, continuity, ease of response)
9. Consider ahead of time how to handle missing data
10. Anonymous data and data protection

Key insight #5 – The art of data analysis

September 2013 GRADschool
 Available places: 96
 Applications: 164
 Segmentation by gender,
 disciplines, department (trends)

Participant Evaluation stage	Response rate
Pre-course questionnaire	100%
Post-course 7 day feedback and questionnaire	72%
Post-course 3 month feedback and questionnaire	36%

2. Could you please answer the following questions;			
2.a. I have been thinking about topics we covered at GRADschool.			
1	Yes:		77.1% 27
2	No:		8.6% 3
3	I intend to:		11.4% 4
4	Not interested /not applicable:		2.9% 1
Ranking Statistics (ranks shown above in red): Median rank: 1 Mean rank: 1.4 Variance: 0.7 Standard Deviation: 0.8 Lower Quartile: 1.0 Upper Quartile: 1.0			
2.b. I have been discussing topics we covered at GRADschool.			
1	Yes:		62.9% 22
2	No:		34.3% 12
3	I intend to:		2.9% 1
4	Not interested /not applicable:		0.0% 0
Ranking Statistics (ranks shown above in red): Median rank: 1 Mean rank: 1.4 Variance: 0.3 Standard Deviation: 0.6 Lower Quartile: 1.0 Upper Quartile: 2.0			

Why include qualitative data?

1. **Provides depth and detail** : looks deeper than analysing ranks and counts by recording attitudes, feelings and behaviours (levels 1,3 and 4)
1. **Creates openness**: encouraging people to expand on their responses can open up new topic areas not initially considered
e.g “Which challenges are you currently facing?”
3. **Simulates people's individual experiences**: a detailed picture can be built up about why people feel or act a certain way
4. **Attempts to avoid pre-judgements**: if used alongside quantitative data collection, it can explain why a particular response was given



Coding

Coding the data makes it easier to search the data, to make comparisons and to identify any patterns that require further investigation.

Codes can be based on:

- Themes, Topics
- Ideas, Concepts
- Terms, Phrases
- Keywords

Informal feedback and anecdotes

- Does the formal and the informal feedback match?
- It is about researchers and their experience?
- Do you have a process to collate the data?



*“Everything that can be counted does not necessarily count;
everything that counts cannot necessarily be counted”*

Albert Einstein

*“True genius resides in the capacity for evaluation of uncertain,
hazardous, and conflicting information”*

Winston Churchill



Key insight #6 Communicate your findings

- To researchers
 - Website, advertising emails
- Tutors
 - Pre-course meeting exercises
 - Annual report
 - Post-course reflection session
- Budget holders
 - Annual report

Summary

INSIGHTS	
Key insight 1	Engage with stakeholders
Key insight 2	Communicate your Approach to Evaluation
Key insight 3	Embed evaluation with design to maximise development experience (power of reflection)
Key insight 4	Choose carefully your levels and topics of evaluation
Key insight 5	Master the art of data analysis
Key insight 6	Communicate your findings

Evaluation study outcomes

On three levels:

- **Participant learning and experience**
 - Time and space for reflection
 - Understand researchers' experience/evolution
 - Identify challenges
- **Course development**
 - Course improvement
 - Informed tutors able to be at their best for the participants
- **Impact reporting.**
 - Continued funding
 - Participant waiting lists
 - Participant commitment

What's next?

- Communicate with supervisors
- Attract more AHSS participants
- Complete annual report and request feedback
- Continue to engage with other Universities to share best practice.
- Implement our embedded structure of evaluation in other University of Cambridge events

Useful links and resources

- Evaluation cookbook

<http://www.icbl.hw.ac.uk/ltdi/cookbook/cookbook.pdf>

- Vitae Impact and Evaluation Group

<https://www.vitae.ac.uk/impact-and-evaluation>

- Impact Framework

<https://www.vitae.ac.uk/vitae-publications/reports/ieg-report-2012.pdf/view>

Keep in touch

Geraint Wyn Story

gws24@cam.ac.uk

Researcher Development
Programme

University of Cambridge



@GeraintWynStory



Cambridge_PhD_Skills

Natacha Wilson

unfolding.perspectives@gmail.com

Member of Vitae Impact and
Evaluation Group (IEG)

Development/Innovation Consultant
and Trainer

uk.linkedin.com/in/natachawilson/