Evaluation of the DFG-funding scheme „Transregional Collaborative Research Centres“

MO Forum on Research Evaluation
Vienna, 6.10.2008

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Structure of the presentation

- Evaluation – what for?
- SFB/TRR: the programme
- Design of the evaluation
- Results
- Next steps
- Lessons learned
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Evaluation – what for?

- An instrument to identify dynamics and changing priorities in the research landscape and to adapt processes and programmes.

- A basis for systematic and impartial assessment of DFG‘s funding schemes.

In this case:

- Establishment of the programme variation SFB/TRR in 1999 with the requirement to evaluate its usefulness and impact after a 10-year-pilot phase.

- Discussion and decision about the progress and continuation of the programme in the statutory bodies.
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SFB/TRR – Objectives of the Programme

SFB-programme:
- To create core research areas at universities by establishing temporary centres of excellence (up to 12 years)
- To promote scientific excellence ("best of the best")
- To promote interdisciplinary cooperation, to advance young researchers, to promote gender equality in research

Programme Variation SFB-TRR (additional objectives):
- To create networks/to foster cooperation and scientific interaction among 2-3 universities
- To establish core research areas at each university involved
- To increase the no. of small universities/disciplines in the SFB-programme
SFB/TRR: the programme

Number of „traditional“ SFB and of SFB/TRR, that have been established from 2000 until 2007

- today: 15% of all SFB – hum./soc.sc.: 5%, life sc.: 19%, nat. sc.: 25%, eng.: 22%
- funding sum: about 1.6 mio. Euro/year for both SFB and SFB/TRR, increasing but +/- equal

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Design of the evaluation: Objectives of the Evaluation

Objective:
- taking stock of the programme so far
- target achievement and effects: excellence, structural effects, creating networks, advancement of young researchers and women
- comparison with „classical“ SFB
- multi-method design: combination of quantitative, qualitative and bibliometric methods

Non-objective:
- to develop recommendations for the further development of the programm (task of the DFG head office)
- Decision about the continuation of the programme (task of the statutory bodies)
Design of the Evaluation: the Process

- Time frame was set by the Grants committee meeting in May 2009
- Decision: external evaluation
  \[\rightarrow\text{design of the study and preparation of the tender procedure internally}\]
- Internal Working group: one SFB programme officer and one evaluation officer
- Choice of the evaluators
  \[\rightarrow\text{main focus: domain expertise}\]
- Resources: time resources within the head office, financial resources due to commissioning the study externally
Design of the evaluation: Methodology

- **Data Analysis**
  
  qualitative: draft concepts, proposals, decisions memo and minutes of meetings of Grants Committee on Collaborative Research Centres

  quantitative: data and statistics provided by the DFG head office

- **Interviews**

  Coordinators, project leaders, manager, reviewers, committee members, university board

- **Bibliometrics**

  „small approach“
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Do we succeed in funding the best researchers/projects?

Average rating of projects in SFB/TRR and a sample of comparable SFB

Source: DFG-head office, Analysis and illustration: Technopolis
Results: Scientific excellence

- „small approach“ bibliometrics: h-Index of project leaders in life sciences
  - No. of Publications of project leaders in SFB/TRR slightly higher,
  - No. of citations slightly higher
  - in SFB/TRR often a „publication champion“

Conclusion:

→ scientific excellence is equal, if not higher compared to classical SFB
→ often more scientific experience (expected)
Do we foster cooperation?

Example
Results: Cooperation

- more and also more intensive cooperation and scientific exchange than in classical SFB

- planned and formalised exchange of staff; multi-site colloquia, conferences, seminars
  → this is especially beneficial for young researchers

- moderate no. of joint publications; often with external (esp. international) partners
  - strong international integration of the projects
  - funded projects are a snapshot of the „research agenda“ of a research group
Do we create centres of excellence?

No. of SFB/TRR (2000 – 2007),
- by no. of universities involved
- by no. of sites involved

Quelle: DFG-Geschäftsstelle, Auswertung und Darstellung Technopolis

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Results: Structural effects – Participation of small universities

Universities with SFB and SFB/TRR by size

<table>
<thead>
<tr>
<th>DFG-Größenklasse</th>
<th>nur TRR Standort</th>
<th>nur SFB Standort</th>
<th>SFB und TRR Standort</th>
<th>alle SFB und TRR Standorte</th>
<th>alle Hochschulen mit DFG-Mitteln*</th>
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</tbody>
</table>

Source: DFG head office, Analysis and Illustration: Technopolis
Results: Structural effects

- Only few SFB/TRR with more than 2-3 participating universities – but many with some universities that have only few projects

- The universities identify with their SFB/TRR; especially important is the role of the coordinating university

- Allocation of resources and appointment of professors works similar to classical SFB

- Small universities do not participate more often in the programme variation than in classical SFB

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Next steps

- Discussion within the DFG head office; drafting of recommendations for the further development of the programme variation SFB/TRR
- Discussion of the study and the recommendations in the Grants Committee for Collaborative Research Centres
- Decision about the continuation of the programme variation in the General Assembly
- Use and dissemination of results (research policy/science administration/interested public)
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Lessons learned - the Process

- mixed team within the DFG: good combination of programme and methodological specific knowledge

- tender procedure: drafting tender specifications forces to think about what you want

- close cooperation with the consultancy: workshops, working stays, visit of a Grants Committee meeting

- flexibility: increased no. of interviews, added co-publication analysis, intensified SFB-SFB/TRR-comparison

→ key: good preparation
→ tender procedure: you get what you order
Lessons learned – the study: Open questions/desiderata

- study meets needs; most questions were answered

- Lack of indicators! How to determine:
  - interdisciplinarity
  - „risk-taking“ research
  - structural effects?

- methodological questions: what is the right control group?
  - lack of a comprehensive view – who does apply/who doesn’t
  - lack of international comparison

- need for evaluation of the programme portfolio
Thank you for your attention!

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