

EUA-CDE Annual Meeting

Evaluating the Qualification program: A Multi-Perspective Approach to Data Collection

Tim Klinge, M.Sc.

Dr. Katrin Offe, Dr. Robin Lucke

TUM Graduate School

Technical University of Munich



Evaluating the course program

- TUM-GS provides a comprehensive soft skills program
- Data is available about the qualification program, from **three perspectives at three points in time**
 - **administrative data during registration** and the **implementation** of the course
 - **Nacaps survey during the doctorate** on course acceptance
 - **Survey data on graduates** about the applicability and perception of our qualification program

Doctorate-oriented Program	Career-oriented Program
Personality & Self-Management 	Science & Research 
Communication & Methodological Competence 	Entrepreneurship & Startups 
Leadership & Responsibility 	Business & Industry 

How can we use and combine this data to evaluate whether our course program is effective?

Creating a comprehensive picture

- Building on the retrospective picture by recent Graduates regarding the qualification program

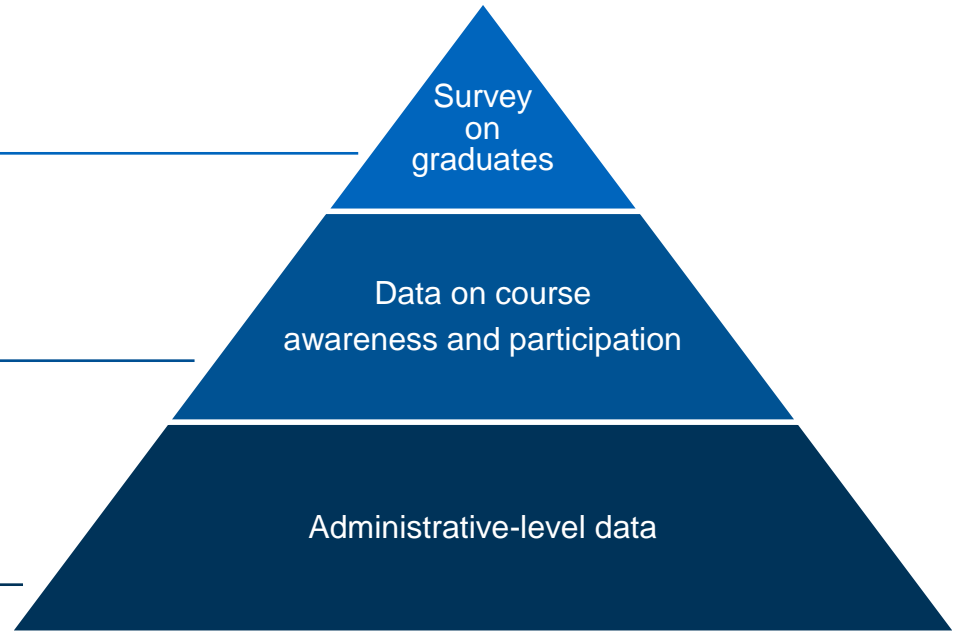
After graduation

- Knowledge of courses and their practical application

During the doctorate

- Direct feedback and immediate response from participants in the qualification program

During registration and after participation



Administrative data – What do we have?

Perspective 1: Data on participants, popularity and content of courses

Data collection at time of registration

- Personal data

Course data

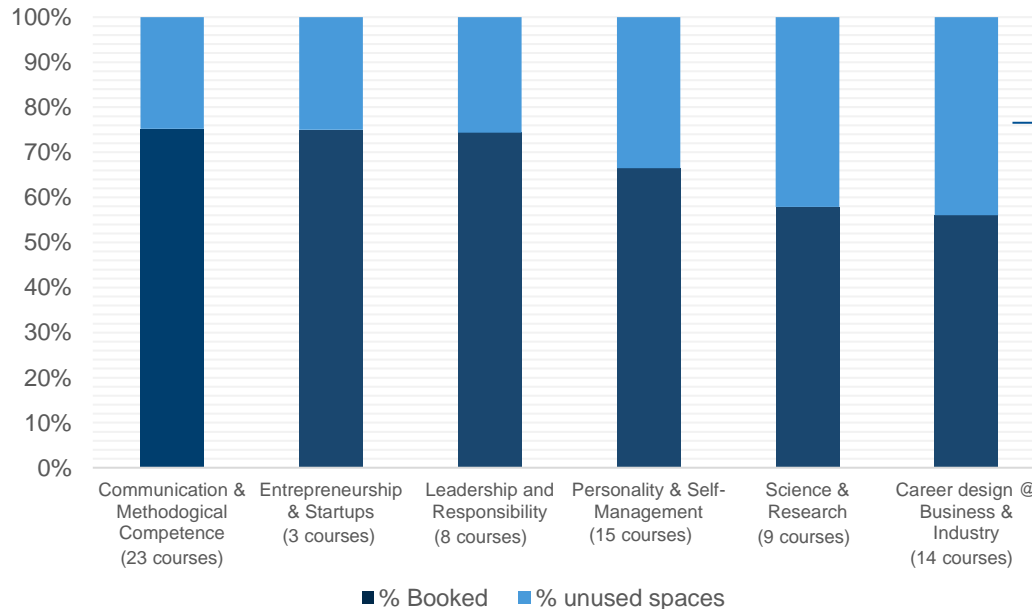
- Available spots
- Content and course categories
- Number of registrations including waiting list

Evaluation of courses

- Source of information about course
- Satisfaction
- Would participants recommend the course?

Data on courses by category

Booked vs. available places



Almost half of the spaces for career planning courses are unused

Yet, career planning courses are consistently highly rated

Source: Database DocGS,
own calculations.
Period: WS 23/24

Survey data during the doctorate

Perspective 2: Awareness and participation in courses

Nacaps Survey data: >40 indicators on doctoral education from three cohorts

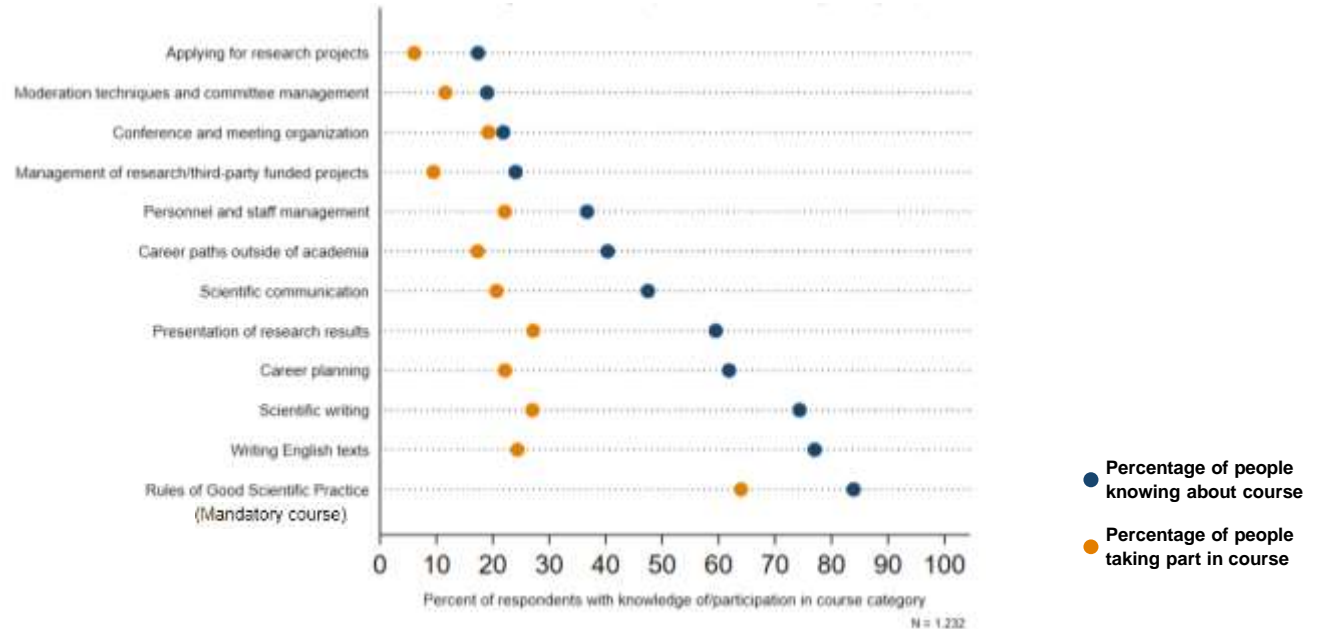
- Longitudinal survey of doctoral candidates in Germany
- Most recent cohort with more than 19,000 responses (>1,300 from TUM)
- Respondents in each category are doctoral candidates with start of doctorate <2 years ago

The data allows us to analyse the following topics:

- Awareness of the qualification program
- Support from Supervisors
- Engagement in skills acquisition

Engagement in skills acquisition

Which of the following courses and lectures are you **aware of** and in which did you already **take part in**?



Graphic only shows responses from TUM

Source: Nacaps 3rd Cohort, 2020/2022

Graduate Survey data – Career tracking survey

Perspective 3: Satisfaction & Applicability of skills

Measuring satisfaction

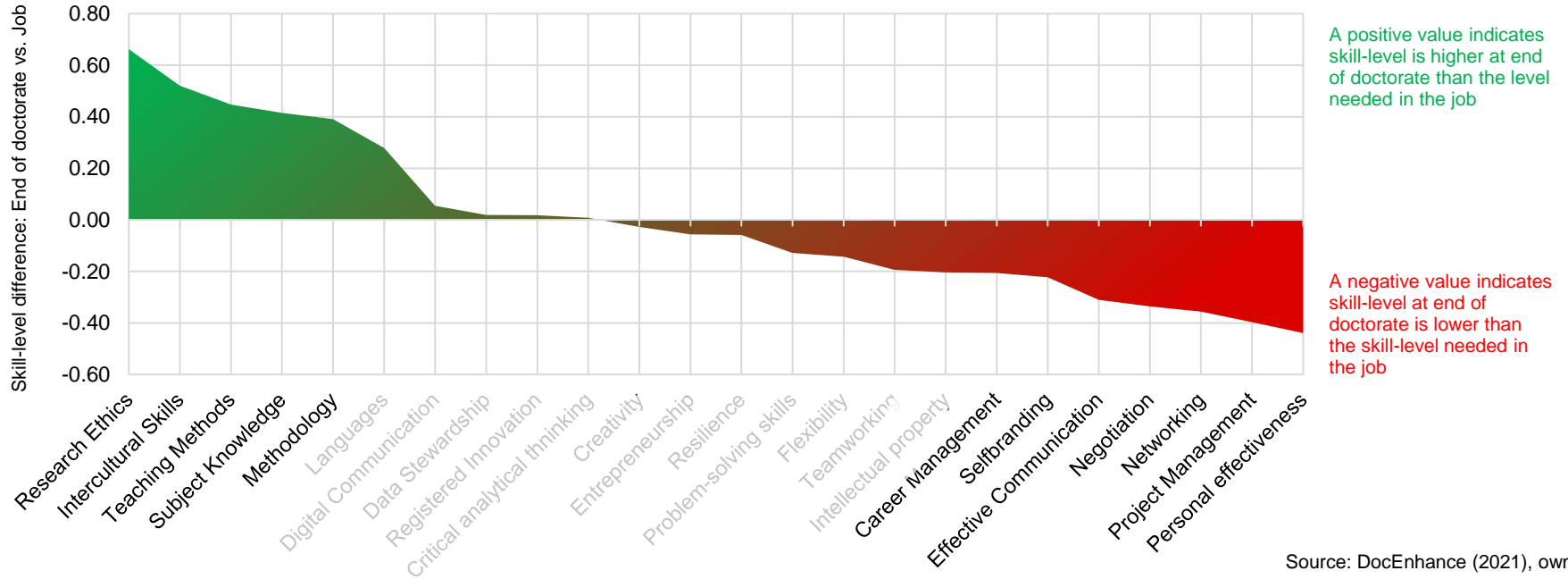
- Fostering continuous improvement efforts
- Program quality, teaching methods, and support services

Applicability of skills acquired

- Evaluating the alignment of acquired skills with workplace demands
- Contributes to successful transitions from academia to professional roles

Skills gap

Self-reported competences at the end of the doctorate vs. skills needed in job



Source: DocEnhance (2021), own calculations
N = 873 - 979

Combining the data

Career Management

Good Scientific Practice

Negotiation

Administrative Data

Course is offered	280 places p.a.	1956 places p.a.	✓
Course is being booked	✓	mandatory	⊗
Course is evaluated	Very good	Very good	Good

Survey Data

Course is known to audience	40 %	85 %	-
Course is taken by audience	20 %	65 %	-

Graduate Survey

Course skills are important	✓	✓	✓
Skills match work requirements	⊗	✓	⊗

Measure

Promote in Newsletter

-

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Promote in Newsletter

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Restructure QP, add course

Combining the data – An example

- **Monitor developments and needs**
 - Which courses need more available places?
 - Which are yet unknown to most but highly rated?
- **Manage our qualification program**
 - Which course offerings should be expanded?
 - Are communication channels adequate for certain topics?

The combination of data led to changes in our qualification program:

- ➡ Restructure of Transferable Skills categories
- ➡ Improvement of visibility of offerings



Core implications

Objectives of acquiring data need to be defined pre-gathering

- A clear path should be set out to guide data collection

A comprehensive concept is required

- Observing the topic from various perspectives is key

Data sources should be complementary and harmonised

- Only in combining different approaches, the topic can be understood in its entirety

Conclusion: Defining objectives in collecting data

- **Purpose matters:** Collecting data should not become an end in itself
- **Provide guidance:** all data collection and evaluation should follow a strategic direction
- **Foundation:** Data should be evidence-based support for stakeholders to improve services and align with objectives
- **Applicability:** Gather data that helps institutions involved in qualification evaluate and improve their services.