

New professional roles? Competencies and task profiles in IT-supported research reporting

Introduction to the research project “BERTI”

Münster, November 20th 2019
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Outline

- BERTI: Research on CRIS-Manager's Work
- Professional Competence and Roles
- Roles of CRIS-Managers – A blueprint

The Research Project BERTI

- CRIS require personnel with competencies in different working areas!
- Is there a new type of research manager (“The CRIS Manager”) emerging?
 - Main Question of BERTI!
- Approach
 - Review & analysis of the competence construct
 - Case studies on 10 European HEIs
 - Survey on all German HEIs
- Project Data
 - DZHW / Petersohn, Thiedig, & Schelske
 - 07/2019- 06/2022
 - Granted by federal ministry of education and research



Federal Ministry
of Education
and Research

Professional Competence

A fuzzy but fruitful construct

- Broadly used, vigorously discussed, several definitions/disciplines, difficult to measure validly
- Beneficial for HR management and competence-based education & training

Basic idea

- real-life situations, context, readiness for action
- in contrast to intelligence and abstract knowledge (McClelland, 1973)
- Includes:
 - (Explicit) knowledge, skills, attitudes = KSA
 - Self-motivation, self-organization,
 - Implicit (contextual) knowledge & routines

(Weinert, 2001, Klieme & Hartig, 2007)

Competency Modelling via CanMEDS

- Competence-based medical education (Frank, 2005*; Frank et al., 2015**)
- Established in CAN, NL; 2020 in Germany
- **7 Professional Competences** as **Roles**!
- Each **Role**: Clear Definition & Description of Abilities & Areas
- **Medical Expert** = Core
- Example: **Communicator**

* Frank, J. R. (2005). The CanMEDS 2005. Physician Competency Framework. Ottawa: Royal College of Physicians and Surgeons of Canada.

** Frank, J. R., Snell, L., Sherbino, J. (2015). CanMEDS 2015 Physician Competency Framework. Ottawa: Royal College of Physicians and Surgeons of Canada.

Goals

- Improve patient care
- Get a broad & valid description
- Educate/assess based on outcomes
(ten Cate, 2017)

Tasks and Competencies of CRIS-Managers

Tasks

- Searching
- Cataloguing
- Classification
- Data validation
- Data management
- Mapping & modelling
- Statist./bibliometric analyses

- Conception & development
- Information visualization
- System administration

- Communication & presentation
- Training, consulting & support
- Documentation

Data Expertise

Operation & Develop. of the System

Community Work

Competencies

- Cataloguing/metadata standards
- Ontology-engineering
- Classification, taxonomies, thesauri
- Information retrieval
- Statistics
- Bibliometrics & scientometrics

- Web applications
- Application programming interface (APIs)
- Hardware & client OS (Unix, Linux, Windows)
- Formats/languages.: RDF, OWL, XML, SPARQL, Python, JAVA

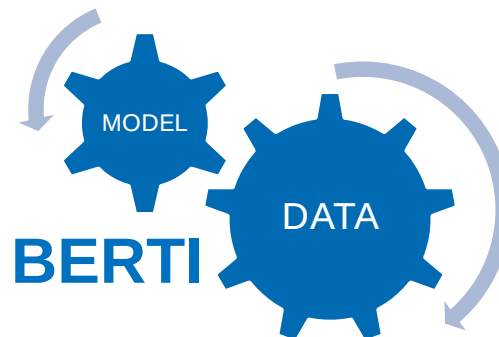
- Project management
- Knowledge management
- Science management
- Collaborative work
- Information law/copyright

Blümel, Walther, Zellmann, Hauschke, Wartena, & Hahn (2018). <http://nbn-resolving.de/urn:nbn:de:0290-opus4-32963>

Roles of CRIS-Managers (?)

However

- Bibliometrician
- Scientist
- IT expert
- **“Research service manager”**
- Academic advocate
- Communicator
- Collaborator



- Physicians
 - Clear role set
 - by professional & legal standards
- CRIS managers
 - Different role sets, depending on
 - Job description, jurisdictions
 - Structure & alignment of the institution
 - National arrangements

Benefits of a Competence Model

- Goes beyond mere job analysis and job descriptions
- Is targeting organizational goals und future requirements
- Easy to communicate / to remember
- Valuable for
 - Leadership & team motivation
 - Job advertisements & personnel selection
 - Competence-based education & training
- **Roles** are particularly useful because they involve and disclose expectations of the respective **professional competence** - both for the FIS manager and for various stakeholders.