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
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

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

**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

Roles of CRIS-Managers (?)

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

However

- 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 and 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.