

CoSMed - Competence Measurement based on Simulations and adaptive Testing in Medical Settings



Quelle: www.hausarzt-scheibe.de/Leistungen/diagnostik.html

The project is focused on competence measurement and modeling in the health sector at a medium level of proficiency (ISCED level 3), namely for Medical Assistants.

It is the aim of the project to develop a multidimensional competence model and subject it to empirical validation. The project focuses on occupational knowledge, specifically on conceptual and procedural knowledge, but it is recognized that acting successfully in medical settings also requires cross-occupational competencies such as communicative and co-operative skills. Moreover, there is strong evidence that competence models in occupational fields must include non-cognitive facets, for example emotion, motivation, and self-regulation.

In order to characterize the domain, occupational tasks and processes, working tools and work results were observed in different institutional settings and, additionally, current vocational curricula were analyzed. This resulted in a taxonomy of the required knowledge and skills. A three-dimensional domain-specific competency model was developed which distinguishes between the facets of medical-health-related tasks in the care of patients, socio-communicative skills, and business-administrative activities.

The competency model takes theoretical assumptions as to the modeling of levels of professional competence into account which are to be tested empirically.

It is anticipated that during the next few years, the research will be extended with the aim of measuring learning outcomes in Vocational Education and Training across international settings. Therefore, in different countries an active search is ongoing for partners who are interested in competence measurement in the social and health care sectors as well as in other occupational fields, in particular in the field of business administration, where projects with a similar approach are in progress.

The research project CoSMed is part of the funding initiative "Technology-based Assessment of Skills and Competencies in Vocational Education and Training" (Ascot).

Adaptive Testing:

In order to obtain good estimates of individual abilities, while keeping the effort for testees within acceptable limits, adaptive testing is envisaged as a viable approach to measuring conceptual knowledge in the medical field.

Computer simulations and embedded video clips :

Procedural professional knowledge will be assessed by way of computer simulations and video clips.

Measuring communicative and co-operative skills

Research group:

Coordination: Prof. Dr. Susan Seeber, Göttingen University, Germany; Department of Business Education and Human Resource Development; susan.seeber@wiwi.uni-goettingen.de

Joint Project Partner:

Prof. Dr. Matthias Schumann, University of Göttingen, Chair of Application Systems and E-Business

Christian Triebe; University of Göttingen, University Medical Center Göttingen, Management and Administration, Personnel Development

Dr. Agnes Dietzen, Federal Institute for Vocational Education (BIBB), Bonn



Networking Event auf der AERA 2013

Bildungsforschung aus Deutschland auf Kooperationskurs in den USA