2.2.401 – Taxonomy, verbs and regulatory structure for initial and advanced training

Research project: Abstract

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Using a new approach, the systematisation of state-recognised initial and advanced training regulations are to be *described* and *explained* in fundamental terms in order to improve the governance of vocational education and training. A first objective is to generate typical and specific taxonomic semantic markers (verbs and nouns where relevant) for the qualification level with which an occupation is aligned as concrete results of the project. Secondly, the intention is to examine higher education and vocational education and training with regard to their comparability and mutual capacity for credit transfer. Thirdly, the link between national and EU-wide VET classification systems is to be explored in greater detail.

Taking two existing systems as a basis – the *Classification of Occupations* (KldB), which has been deployed nationally since 1993, and the *European Taxonomy of Skills, Competences, Qualifications and Occupations* (ESCO), launched in 2018 – this project will narrow and further intensify the focus on the categorisation of initial and advanced training occupations by identifying and utilising connecting factors between the KldB system and the ESCO. These classification systems will be expanded to include an underlying content description which is based on the periodic table as a metaphor. Just as in the periodic table, the aim is for the fundamental properties of the verbs and nouns used in the training regulations to serve as a vehicle for the identification of regularities and for classification.

In order to achieve this goal, the first step involves a thorough analysis of the existing classification systems to generate a model which will permit forecasts and therefore also be falsifiable. It will also be productively usable in order to subject the training regulations to more detailed analysis with regard to aspects such as concentrating the focus on the respective DQR reference level.

In the second step, all 327[1] state-recognised training occupations are subjected to a quantitative semantic analysis and investigated in respect to which verbs and nouns occur frequently at which DQR reference level as well as in respect to which verbs and nouns may only be found specifically at one DQR reference level. In the third step, occupations are sorted at a structural and semantic level in accordance with the regularities identified. In addition to this, the overlaps between higher education and vocational education and training (*credit transfer* pursuant to HRK terminology) will be investigated in order to legitimise and strengthen permeability between the two areas. A fourth stage involves applying the revised model to just over 150 advanced training occupations[2] and retraining programmes in order to determine the model quality achieved and to further optimise forecasting quality.

In a final step, a pool of verbs and nouns relating to the level-specific or DQR level-specific depiction of initial and advanced training programmes are to be generated. This will be made available as a guide following participatory validation by stakeholders within the scope of regulatory procedures.

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[1] Index of Recognised Training Occupations 2022, p. 4: "The number of recognised training occupations or of occupations deemed to be recognised is 324 including ship's mechanic". The current number of recognised occupations is, however, 327. Notification from Ms. Wächter.

[2] This issue notwithstanding, 1,003 advanced training and retraining programmes are listed in the database. A selection of 150 advanced training occupations appears to be sufficient to cover this area.