Media-pedagogical competence of company-based training staff

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Opportunities to deploy digital media for the initiation and support of vocational teaching and learning processes are comprehensive and diverse. The associated challenges for company-based training staff are currently being investigated within the scope of the BIBB research project DiMBA. This project is based on a model of media-pedagogical competence which is presented in this article.

Background information: The DiMBA research project

The requirements being placed on company-based training staff are greater than ever. They ask for a targeted approach to addressing the opportunities of delivering vocational education and training in a way that is supported by digital media. They need to develop relevant concepts and implementation scenarios within the context of their respective training remit. At the same, the media ensemble of trainees is very much shaped by digital media. This requires an ability on the part of the company-based training staff to have a clear view of and to evaluate the functionalities and possible areas of deployment of digital media (learning software and platforms, social media, tools, apps, e-books etc.). Providers, vested interests, opportunities and risks, restrictions, development trends and other aspects need to be subjected to critical evaluation in order to create a basis for a well-founded selection of digital media to increase the quality and efficiency of vocational education and training. Such appropriation of digital media is not self-evident and requires relevant competences.

The BIBB research project "Digital media in vocational education and training – media appropriation and media use in the everyday practice of company-based training staff" (DiMBA) is investigating the challenges faced by company-based training staff in this regard. The main issues are as follows:

- How do company-based training staff select digital media for everyday initial and continuing training practice?
- How are digital media integrated into initial and continuing training processes?
- What support do company-based training staff require in order to be able to integrate digital media into training in the best possible way?

These questions are being investigated via a cross-domain approach in the occupations of vehicle mechatronics technician, management assistant for retail services and geriatric nurse.
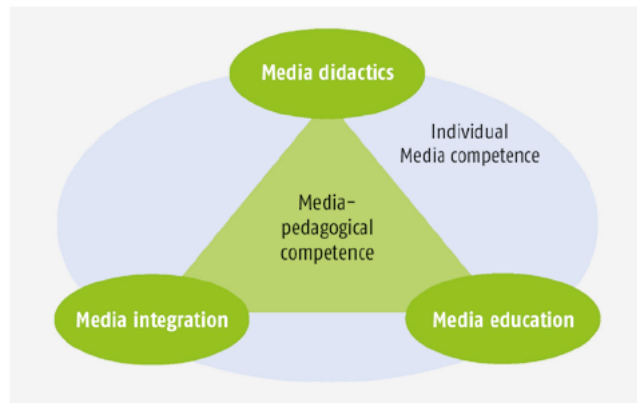
Model of the media-pedagogical competence of company-based training staff

The basis for the investigation is the development of a model describing the necessary media-pedagogical competence that training staff should possess in order to integrate digital media into vocational training processes. The first stage of the development is to analyse existing approaches towards media-pedagogical competence from the K-12 education (cf. Blömeke 2000; Herzig 2007; Tulodziecki/Herzig/Grafe 2010) and evaluating these with regard to suitability for vocational education and training practice. The result was a prototypical draft model of media-pedagogical competences of company-based training staff which had its foundations in models that had already been the object of empirical evaluation. In the second stage of the process, this prototype was investigated via the outcomes of expert interviews conducted with academic researchers from the field of VET and with training staff from the domains stated who were familiar with using digital media. On the basis of the findings, the prototype was developed further to create a model which permits a differentiated and cross-cutting consideration of media-pedagogical competences.

The model comprises the three components of "media didactics", "media education" and "media integration", all of which correlate with one another (cf. Figure 1, p. 20). The media-pedagogical competence of company-based train-

Figure 1

Components of the media-pedagogical competence of company-based training staff

Figure 2

Process elements of media-pedagogical competence appropriation

ing staff is driven by the individual media competence of the trainer, i.e. basic competences in media use and design, media theory and media criticism (cf. Baacke 1999). Although media-pedagogical competence develops pursuant to the conditions of individual media competence, it is by no means the same thing.

The component of "media didactics" encompasses the didactically justified deployment of digital media to support teaching and learning processes. "Media education" refers to the perception of media-related education and training tasks, and the element of "media integration" denotes the incorporation of media-pedagogical concepts into a company's governance. These components enable media-related and pedagogical actions in VET practice to be described in a structured and precise manner and, in particular, permit the direct derivation of specific practical relevance.

- *Media-didactic actions* include such aspects as the identification and selection of visualisations, simulations and animations which are suitable for training.
- *Media-education actions* are, for example, displayed in addressing the topic of ethical aspects of media use, such as initiating and communicating appropriate measures to combat cyber bullying.
- *Media-integrating actions* encompass elements such as involving the works council and company data representatives when introducing a learning platform.

The model maps the acquisition of media-pedagogical competence as an ideal case scenario. The individual process elements of "conditions", "approaches", "existing examples" and "own provision" interlink and indicate the possibility of the continuous development of media-pedagogical professionalism (cf. Figure 2). The fact that the process elements are related to the individual components of media-pedagogical competences now enables the latter to be further differentiated and operationalised. In the
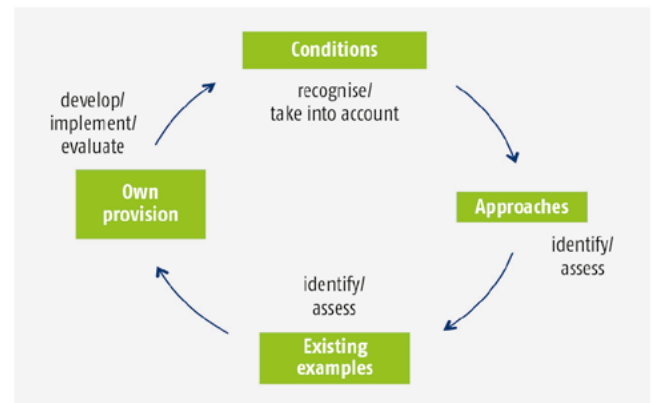
area of "media didactics", for example, the conditions for media-didactic actions need to be initially recognised and taken into account before approaches towards and examples of media-didactic actions are subsequently identified and evaluated in order to be finally able to create a basis for the development, implementation and assessment of the company's own provision. The findings and experiences emerging from this process then once more inform the cycle, which in principle may be repeated as many times as necessary. The same applies to media education and media integration.

Outlook

The model of media-pedagogical competence was used to design a survey on the current use of media by company-based training staff, and this was implemented in the form of an online questionnaire during the period from May to October 2016. ◄

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