

# Chapter 1

## #ko.vernetzt: Digital Transformation of an Educational Organization from a Media Educational Viewpoint



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### 1.1 #ko.vernetzt: Assumptions and Leading Concept

The project *#ko.vernetzt* started in 2017 with the aim to support the process of digital transformation in *Kolping-Bildungswerk Paderborn* for 3 years as an example of a networked educational organization. Based on quantitative and qualitative research, it should be possible to draw conclusions about the challenges an educational organization is confronted with and what kind of support it needs for its development and the development of its stakeholders.

The project's practice activities are built on the premise that forward-looking vocational learning is driven by well-trained employees. Therefore, it is necessary to expand the skills and competences of employees in using digital media tools to analyze and fulfill complex and non-routine tasks in the long run, rather than to only train them once.

To support the digital development of the organization, it is important to promote each employees' media competence, which requires a sustainable qualification of multipliers among the staff. It is not only about broadening the educational program by media education and media didactics. The development of digital learning processes and their structures must be based on the needs of the executive staff and the employees who must be involved from the very beginning of the process.

A media educational qualification and a mentoring program should be constantly developed based on existing framework conditions, experiences, and needs of pedagogical specialists in the various institutions of *Kolping-Bildungswerk Paderborn*. The exchange of views from participants in multi-stakeholder dialogues (qualitative research), seminars, workshops, and webinars and also within the professional mentoring of all practical activities should provide an insight into the

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importance and influence of digital transformation for educational work (Bröckling 2017).

Based on the needs of the employees and the educational work, the support through the implementation of a digitization strategy was accompanied by five action-leading questions:

- What ideas about digitization exist among the employees, and how do these ideas influence their own educational work?
- How can the process of digital transformation be supported, designed, and promoted in the organization for the benefit of all groups of people involved in the organization?
- How can the increase in digital work and organizational processes in educational institutions be dealt with by enhancing media competence among employees?
- How can education staff be strengthened for new challenges of digital education? Are there special needs that can be identified?
- How can one transfer the research results regarding the project activities with *Kolping-Bildungswerk Paderborn* to an open discourse and other educational organizations?

In this project all partners work interlinked: There are partners working in science with qualifications in qualitative and quantitative research (Jun.-Prof. Dr. Sandra Hofhues, Professorship for Media Didactics and Media Education at the University of Cologne, and Prof. Dr. Dirk Ifenthaler, Chair of Business Education V – Technology-Based Instruction Design at the University of Mannheim) and one institution who initiates the practice activities with *Kolping-Bildungswerk Paderborn (JFF - Institut Jugend Film Fernsehen Berlin-Brandenburg e.V.)*. This includes the support of staff and organizational development (individual media development projects), media education (documentation, networking, and mentoring), as well as the evaluation of developments and progress (scientific documentation, evaluation, and reflection) during the project.

This article discusses the leading concepts of the project *#ko.vernetzt* from a practice-oriented media educational perspective. After outlining the underlying assumptions of the project (1.1) as well as central areas of activity (1.2), the understanding of media competence (2.1), as well as the related topics (2.2) and formats (2.3) of qualification, is outlined and reflected upon (2.4). Finally, the three central perspectives of the project – the organizational perspective (3.1), the employees' perspective (3.2), and the media educational perspective (3.3) – are explained and summarized in Chap. 4. The article is thus intended to outline the approach, the guiding ideas, and the central elements of *#ko.vernetzt* and to bring the media educational perspective into the discourse on the digitization of educational organizations.

### ***1.1.1 Connected Organization: Connected Learning?***

In terms of digitization, lifelong learning plays an increasingly important role, especially in professional contexts. The approach of #ko.vernetz therefore assumes that people working in education must be encouraged to constantly bring themselves up to date as employees, to react flexibly and agilely to external requirements, and to generate creative solutions to face challenges as a networked organization. #ko.vernetz therefore asks the question on how learning can take place in a networked way in educational organizations. It is assumed that people must be empowered to implement digital media into educational processes themselves in order to develop as an organization interconnectedly. To achieve such a target, the first steps in digital transformation processes need to be accompanied by a constant dialogue between managers, employees, and external experts. It should be noted that *Kolping-Bildungswerk Paderborn* is a complex, decentralized educational organization. In #ko.vernetz the connection between the networked organizational structure and the networking of learning and communication of the stakeholders should be examined in more detail and further developed in a meaningful way. For this purpose, selected employees should become multipliers of digital education. They should be qualified and accompanied, so that they can carry out their own adequate decentralized development projects and consolidate them in an organized network. The project thus was aimed at the institutional anchoring of work-related digital competence of employees in educational organizations.

*Kolping-Bildungswerk Paderborn*, located in the northwest of Germany, has approximately 2000 employees, 25 subsidiaries, and over 5000 addressees daily. It appeared to be the ideal testing ground, because it covers the entire educational biography of a person and central education sectors, from early childhood to (secondary) school, vocational education and training, up to training in the post-vocational phase. It is assumed that the diversity of educational programs and the fact that they are networked in a holding company would make it possible to analyze educational measures and institutions in the context of future-oriented digital education and to develop target group-specific, employee-oriented, and modular educational programs. To what extent this has been achieved is to be outlined in an initial appraisal from the viewpoint of media education.

### ***1.1.2 Four Areas of Activity***

In order to achieve the goals outlined above, the project #ko.vernetz pursued four central action fields, each in the responsibility of one partner but implemented cooperatively and closely interlinked with the other partners:

## 1. Qualification Tailored to the Needs of the Employees and the Organization

The qualification measures (seminars, webinars, learning nuggets), which were conceived and implemented by *JFF – Institut Jugend Film Fernsehen Berlin-Brandenburg*, were intended to enable interested employees to acquire special digital tools and topics in the context of digitization on the one hand and to provide space for reflection and discussion about the integration of digital media in educational concepts and processes on the other. With the meaningful bundling of the partial competences, the target group-oriented promotion of work-related digital competence should be tested and reflected and its approach further developed.

It should be possible to compile the respective qualification modules in order to obtain a certificate. In addition to a simple certificate of attendance for participating in an individual qualification module, further, graduated certificates were also considered.

## 2. Individual Media Development Projects

The initiation of media development projects was intended to strengthen the initiative of the employees to implement their own skills and competences promoted in the qualification into individual project ideas within the organization. These should be accompanied in a “digital learning lab.” The projects should build on the respective resources and skills of the employees as well as on existing structures within the organization and enable a sustainable anchoring of the impulses that would be set by *#ko.vernetzt*.

## 3. Documentation, Networking, and Mentoring

The employees who participated in qualification seminars should pass on their findings to colleagues in a peer coaching network. The regular exchange about individual (and organizational) progress in the project should also take place via multi-stakeholder dialogues (see Chap. 2 in this volume), in virtual classrooms or blogs. Thematic groups should be formed in which ideas can be developed. In addition, thematic background information should be available for everyone interested on the website [www.koernetzt.de](http://www.koernetzt.de). The media development projects should also be displayed there. For each project, a separate project area with a weblog was set up for this purpose, which can be closed for participants only or made publicly accessible. The participants in the qualification are encouraged to post texts, photos, videos, etc.

## 4. Scientific Documentation, Evaluation, and Reflection

The project partners are responsible for the initiation and evaluation of qualification and further training of employees, collect and evaluate findings on the adequate media educational support of an educational organization, and document interim results in a weblog/open book. The multi-stakeholder dialogues should serve the scientifically documented communication about the project, allow indi-

vidual or organizational questions of the participants, and promote the project-related exchange between managers and employees.

The qualification should be anchored and developed in the organizational culture via multi-stakeholder dialogues. Thus, in addition to the added value for the employees and participating institutions during the project, the anchoring and further development of the holding company should be initiated and systematically integrated into the organizational development (see Chap. 2 in this volume; Hofhues et al. 2018).

The present results from the multi-stakeholder dialogues have been summarized in two recommendations for starting activities and three research reports within the project period:

- Gutes Arbeiten mit digitalen Technologien im Kolping-Bildungswerk Paderborn. Handlungsempfehlung UzK-01 (Hofhues et al. 2020a).
- Wissen und Wissensmanagement im Kolping-Bildungswerk Paderborn. Handlungsempfehlung UzK-02 (Hofhues et al. 2020b).
- Bedingungen für Wissens- und Innovationsmanagement in einem Bildungswerk. Forschungsbericht UzK-01 (Helbig et al. 2020a).
- Perspektiven auf (digitale) Technologien von Fachkräften in der Pflege. Forschungsbericht UzK-02 (Helbig et al. 2020b).
- Bedingungen digitaler Lehre in einem Schulnetzwerk. Forschungsbericht UzK-03 (Helbig et al. 2020c).

In this article, the first results from the scientific monitoring are combined and outlined with observations from practice activities from a media educational perspective. The scientific evaluation is under the responsibility of the partners of the University of Cologne and the University of Mannheim (see Chaps. 2 and 3 in this volume).

## 1.5 Qualification

The qualification of employees, especially in the educational sector of the organization, is a central element of practice activities in the project *#ko.vernetzt*. The project did not pursue a deficit approach to impart (supposedly) missing competences, but an approach that bundles and promotes existing competences in a work-related way. This includes the acquisition of special digital tools as well as their reflection and integration into existing or new educational concepts. However, it is assumed that demand-oriented offers related to digitization and everyday workflow are necessary for the success of the project, both individually and in their entirety.

The program design should be cooperative or participatory, i.e., qualification modules should be selected (and further developed) by exemplary topics in a demand-oriented way with employees. The promotion of media competence and qualification regarding digital education should always be geared to the needs of educational practice. This is linked to the hope for a high level of participant involve-

ment and a certain sustainability. Thus, it was assumed that the digital transformation of educational organizations can only succeed if the employees are adequately involved in the process and their needs, wishes, and resistance are taken seriously. This includes preparing them for changing working conditions. The basic assumption is that, if they deal competently with challenges of the digitized society, they can promote the media competence of their learners and apprentices and prepare them for a professional life in the age of digitization. Accordingly, they need media-pedagogical competence (see also Rohs et al. (2017)).

The project approach initially assumed that two areas of competence are particularly important for employees in educational organizations in the digital age: work-related skills and media literacy related to digital media. Both areas are to be interlinked in the concept of work-related digital competence. After outlining this concept, qualification topics and formats are presented. The chapter closes with a critical reflection on the qualification measures.

### ***1.5.1 1.2.1 Work-Related Digital Competence***

In the context of vocational training, a concept of media competence oriented on instrumental skills predominates. It focuses on the usability of dealing with media in an economic sense or the purpose-related qualification for certain digital tools. The concept of media competence in *#ko.vernetzt* also encompasses a reflection on social developments associated with media and digitization as well as individual media action patterns with regard to their social and societal function as a requirement for a confident and self-determined way of living (Schorb and Wagner 2013, p. 18; Brüggem and Bröckling 2017). This is based on an integrated understanding of competence that includes cognitive, motivational, and emotional components (Rausch and Wuttker 2016). Thus, in qualification, aspects of personal development and social capacity to act are given priority over purpose-rational qualification, efficiency, and technical skills (Theunert and Schell 2017). Accordingly, they play a central role in the understanding of work-related digital competence:

1. Work-related digital competence is the ability to constantly keep oneself up to date as an employee (and as an organization), i.e., to react flexibly and agilely to external requirements and generate creative solutions to face challenges as a networked organization. Its aim is to achieve an entrepreneurial and professional “maturity” regarding digital media.
2. In this context, media competence is not only about organizing the use of digital media in everyday working life but also about being able to reflect the context of social development. In doing so, the designed educational process must always include constant technological change and a reflection about how it affects society (media education).

The main objective of the project is the promotion and specification of such work-related digital competence, in which employees are not only enabled to use

certain digital tools. It is an essential component to sustainably anchor digitization in *Kolping-Bildungswerk Paderborn*. The participating employees should be qualified as experts in their respective institutions. As multipliers, they should initiate processes in their working environment, in which they should be supported by the media education experts in the project team of *#ko.vernetzt*.

### 1.5.2 1.2.2 Topics of Qualification

In order to promote work-related digital competence, central themes of digitization had to be integrated into educational work. These topics were later passed on to employees in various qualification formats – see Sect. 2.3. From framework conditions and legal basics to specific media educational or media-didactic content, various dimensions of digitization were addressed. Individual topics that were originally planned, such as changes in the work environment, gamification and badges, or the programming of apps, were not further pursued. However, seven topics that had already been targeted in the conception were dealt with as planned. Most of them are in the area of educational work, didactics, and pedagogy, but some of them also deal with overarching topics such as collaborative work, knowledge management, and internal and external communication:

*Mobile technologies in educational work:* Smartphone ban vs. BYOD, sensible use of mobile media in learning contexts, building a technical infrastructure, tools for mobile learning, apps, Web apps and utilities, basics of programming.

*Design of digital learning settings:* Flipped classroom, webinars and learning platforms as a didactic instrument, understanding of collaborative working and ways of organization, designing digital learning content, visualization of teaching and learning content with presentation tools.

*Designing digital educational materials:* Digitizing educational materials, exchange of proven concepts in the sense of the open-education idea, designing learning content with learners, film and video as learning tools (instructional films, tutorials, explainities, performance videos), audio work and podcasts (basics, testing), interactive learning posters.

*Legal basics:* Copyright, terms of use, data protection.

*Knowledge management:* Digital tools for cooperation, OER, digital mind mapping tools (didactical/technical) and their integration into educational processes, Internet research and WebQuest, reflection and processing of information, professional search strategies, options for documentation.

*Collaborative work:* Cloud computing, digital organization of work processes and agreements, exchange of educational materials and documents, options for brainstorming, cooperative text work, development of educational materials.

*Blogging and websites:* Content management, dealing with platforms and blogging software, Web apps and websites, reflection on the potentials in a personal and professional context.

The topics of the offered qualifications can be summarized under different aspects, which are not selective but allow a clustering:

*Media didactics and tools for educational work:* Presentation tools, learning platforms, collaborative tools, learning videos/explanatory videos, mobile learning, flipped classroom, designing webinars, barrier-free learning offers, virtual and augmented reality in educational work.

*Media education topics:* Legal basics, barrier-free learning programs, open educational resources, media education in schools, VR and AR in educational work.

*Organization/structure:* Communication and knowledge management, collaborative tools, webinars.

*Marketing and social media:* Legal basics, presentation tools, explanatory videos.

### 1.5.3 1.2.3 Qualification Formats

As part of the project *#ko.vernetzt*, various qualification formats for the promotion of work-related digital competence were developed, which provided need-oriented support for the employees of *Kolping-Bildungswerk Paderborn*.

#### Workshops and Seminars

Initially, employees were offered workshops as well as 1- and 2-day attendance seminars on various topics, each held in one of the conference hotels of *Kolping-Bildungswerk Paderborn*. The workshops and seminars could be attended independently, and everyone interested could join at any time during the qualification phase of the project. The participants of the seminars received a written confirmation. Altogether 16 face-to-face events, 3 in-depth webinars, and further self-initiated webinars were held. The first three workshops were designed as 1-day introductory or kick-off workshops. One workshop on the topic “Learning Videos” was devoted to getting to know how to create films with a tablet device. The workshop “Learning Platforms” was about the benefits and the possibilities of using these devices in vocational training. A workshop on “Barrier-Free Learning Programs” gave participants the opportunity to learn about the potentials of digital tools for working with heterogeneous and inclusive learning groups. In all the workshops, participants developed an understanding on how to promote media competence in educational work, and they gained more confidence in dealing with digital media. In addition, the first workshops served to build up relationships and determine the needs for qualification measures.

The main qualification series started with the seminar on “Mobile Technologies in Education.” There, possibilities of using mobile devices for educational work were taught and tested. In addition, implementation ideas for one’s own practice were developed.

Two seminars on “Legal Basics of Educational Programs with a Media Reference” took place in particular to increase confidence in dealing with digital media in an educational context by understanding and becoming acquainted with the most important legal basics, from copyright law to the drafting of declarations of consent.



The participants were able to get to know alternative digital presentation and documentation tools in the seminar on the topic of “Presentation Tools,” which was offered twice. Here they also developed and reflected upon application scenarios for their own practice.

In the seminar entitled “Using and Producing Explanatory Videos,” the participants developed criteria for using explanatory videos from the Internet and designed their own learning videos. This gave them the opportunity to learn about and apply technical and cinematic language basics and to develop application scenarios in order to reduce individual restraints.

In the seminar on “Collaborative Tools,” principles of collaborative working were taught, and suitable digital tools were tested for use in one’s own practice.

During the seminar “Designing Webinars,” participants were able to get to know software solutions and acquire didactic basics for the implementation of webinars in their own educational practice.

Within the seminar on “Virtual Reality and 360° in Educational Work,” the participants were able to get to know different technologies and their possible applications in (vocational) education and training, to test individual tools, and to develop their own ideas.

The main aim of the seminar on “Knowledge Management and Communication” was to develop an understanding of the necessity of knowledge management in an institution. What knowledge is available? Which employees have access to it? How is this knowledge organized? Furthermore, tools for better collaboration and shared access to knowledge were tested and reflected upon.

In response to an urgent request from employees, the seminar on “Moodle in Adult Education” was held twice. Here, employees were given an insight into the learning platform Moodle, which they were able to acquire in theoretical and practical parts. They learned about the possible applications, design, and organization of a Moodle course and reflected on concepts of blended learning as well as questions of copyright and data protection when using Moodle and other learning platforms.

The seminar on “Media Education in Schools” was the conclusion of the qualification series in *#ko.vernetzt. Kolping-Schulwerk Paderborn* had previously dealt with the question of digitization and school education in a presence dialogue with the University of Cologne, purchased equipment, and worked out media concepts for schools. In the seminar participants from the different schools got to know additional application possibilities and deepened the intensive exchange among themselves in order to promote digital learning at their schools in the future.

### **In-Depth Webinar**

The participants of the qualification seminars had the opportunity to deepen or expand already acquired knowledge online. The webinars, which lasted 1 to 2 hours, were geared to the participants’ wishes for further training and took place in a secure space for participants only. The in-depth webinars were held on three topics:

- Open Educational Resources: Background and application knowledge for the setting and use of content on the Internet was imparted and tools were presented.

- Flipped Classroom: The participants had the opportunity to get to know the teaching-learning principle and to try out individual tools.
- How to Design Webinars: The participants could test webinars as a format and a tool and exchange ideas on the topic of webinars and possible implementation ideas.

### **Learning Nuggets**

In addition to the actual qualification formats, small learning nuggets such as flyers, postcards, etc. were provided that summarize the contents of the various qualification events in a short, compact, and understandable way. The multipliers should be able to use these to pass on their knowledge to others and to promote the project within their institution. These materials were developed in collaboration with the participants in the qualification seminars in order to make them suitable for the target group and to distribute them. Some challenges arose in the implementation of this element, so that a conceptual adjustment was necessary. In the end, an analogue toolbox was created, which contains individual cards for tools that are also available in digital form on the project website and are continuously expanded. In addition to the toolbox, smaller blogs and articles were created on the project website.

### **The Webinar Series “Digitization and Society”**

For employees of *Kolping-Bildungswerk Paderborn* who are not able to participate in face-to-face seminars and would like to get a general insight into the topic of digitization first, the webinar series “Digitization and Society” should be available. One-hour online-based seminars should take place regularly and should be announced publicly via [www.koernetz.de](http://www.koernetz.de). The webinar series should deal with socially relevant topics such as “digital health,” “digital communication,” or “personal data protection.” Instead of a webinar series organized by the project partners, however, a separate webinar series was created on the multipliers’ own initiative and with the support of the project team, which is primarily used to exchange information between the multipliers and to discuss media development projects.

## **1.5.4 1.2.4 Critical Reflection on the Qualification Measures**

In developing the qualification program, the orientation toward the needs of potential participants was an essential factor. To enable as many employees as possible to take part in the training measures, time resources and individual needs were considered in addition to desired topics. The planned face-to-face events, webinars, and the project website were also used to provide information.

### **Participation and Motivation**

Depending on the interest, an employee could participate in a single or several events. The seminars were not based on each other. Only the webinars provided in-depth coverage of topics that had already been dealt with in face-to-face sessions. Nevertheless, even these were comprehensible without attending the seminars. The attendance at the seminars and webinars varied. This can be explained on the one hand by the thematic focus and thus also the possible link to one’s own professional

practice and on the other hand by organizational conditions. The events were advertised in each case via the management of the respective institutions (as well as the website [www.koernetzt.de](http://www.koernetzt.de)). The decision on participation in measures and access to the training program was made at management level. As a result, not only employees from the vocational training field took part in the qualification courses but also administrative staff or employees responsible for public relations. This resulted in a very heterogeneous seminar group in some cases, both in terms of previous knowledge of the topics and in terms of the respective expectations.

For instance, the seminar on “Virtual Reality in Vocational Education and Training” attracted less interested people, as the topic is probably too far away from their own daily workflow. Apparently, there is a lack of imagination on how to use this technology in education. Furthermore, they associate technical hurdles with it – regardless of whether they exist. The low participation in webinars can also be explained by this fear of contact with new technology. It is a setting that many potential participants are unaware of, and it requires a prior examination of the technical implementation.

It proved to be useful that some managers and employees responsible for IT also took part in individual events. They were able to get to know the added value for the educational work and at the same time learn about the needs of their colleagues to implement teaching and learning with digital media. It was also shown that professionals should not be lone fighters in their institutions but needed to be a helpful back-up. In this way, the motivation can be maintained and transferred to the practical educational work in the institutions.

In the course of the project, it became apparent that it is easier to offer an internal certification in the form of simple certificates of participation for each seminar and to refrain from a complex certificate process. For the participants this kind of certificate is a helpful proof of their recently acquired qualification.

### **Relationship Work and Networking**

The seminar size was limited to a maximum of 12 participants, and in some seminars 2 trainers were involved to consider the individual needs of the participants – especially in the practical learning phases. The orientation toward concrete educational practice was generally perceived as helpful and motivating.

Prior knowledge and experience in using digital media in an educational context were contrasted with uncertainty and concerns. Depending on which addressees the participants are dealing with in their everyday educational practice, there are various uncertainties: Can I safely operate tools and use them sensibly so that they also benefit my addressees? Are my addressees fitter in handling digital media? Do certain technologies lead to a higher motivation or rather to a distraction of my addressees? These and similar questions are of concern to education professionals. For this reason, special emphasis was placed on practical relevance in the qualifications. In addition to practical learning phases, space and time was given for the exchange of ideas and collective development of implementation ideas for one’s own educational work. Besides the use of digital media for teaching and learning, participants

also have marketing aspects in mind. For instance, they discussed how an online presentation tool could be used to promote the institution or introduce projects.

### **Flexibility and Open-Mindedness**

Especially those who attended more than one event should learn that digitization requires flexibility and open-mindedness. In seminars and webinars, they were able to develop these. Throughout the whole project, it became obvious that most of the participants had a positive attitude toward teaching and learning with and about digital media. It is considered necessary and useful. At the same time, however, there are many participants who were afraid of using them themselves or using them in class. Especially if the use relates to a lot of effort (in preparation), some professionals hesitated to do so.

Those who participated in several qualification events increasingly showed a relaxed and open approach to digital tools. The fear of contact and uncertainties visibly decreased. The feedback showed that the acquired knowledge is increasingly being implemented in everyday work. This is not always happening in direct educational work with addressees, but also takes place in the organization and administration. Digital tools are also taken for granted in the context of seminars or webinars. One seminar developed into an internal webinar series in order to get to know and test the format of online seminars. In this way, the participants wanted to gain confidence in using the necessary technical tools and become acquainted with the unfamiliar learning environment.

## **1.6 #ko.vernetzt: Digitization from Three Perspectives**

The central starting point for the support of the digitization in *Kolping-Bildungswerk Paderborn* was the requirements for educational work caused by digital changes. These requirements range from new ways to organize knowledge management to (media-)didactic innovations as well as internal and external communication. The organization and its educational work are always influenced by new requirements. Flexibility is therefore not only necessary for employees but also for the structures of the organization. From a media educational and media-didactic perspective, the question is always when the use of digital tools is appropriate and when it is not. In the following three perspectives on digitization are presented: the organizational, the employees', and the media educational perspective.

### **1.6.1 1.3.1 The Organizational Perspective**

Requirements caused by the digitization that have an impact on educational organizations require holistic changes in the organization. It is not enough to simply acquire technical equipment and to designate an IT representative that is responsible

for the digitization. Rather, profound changes and sustainable strategic decisions are necessary in the context of digital transformation, media-related organizational culture, and learning-space development (Meister 2005; Stang 2003).

*Kolping-Bildungswerk Paderborn* served theoretically as an ideal testing field in this context, because its educational programs cover the entire educational biography of a person and because with its interconnected, but centrally managed, structure, it enables overarching change and decision processes and a reflection of those processes. This requires close cooperation between the involved institutions regarding the implementation of processes, tools, and techniques into the existing organizational structure. This cooperation must be anchored in the organizational structure and requires a long period for implementation and therefore long-term support. Thus, it is important to plan and budget sufficient time, financial, and personal resources for processes of digitization and to make these resources available to employees.

For an educational organization, this means a fundamental rethinking of the calculation of offers, new employee profiles, and the associated new qualifications, as well as the rethinking of educational programs. Especially in large educational organizations like *Kolping-Bildungswerk Paderborn*, which are highly differentiated and decentralized on a large scale, it is important to include different groups and their respective expertise in decisions. These groups can include employees in certain educational areas, technically experienced colleagues, or external experts. Managers and employees should always develop ideas and strategies together at eye level. In doing so, ideas and strategies are particularly efficient when they are oriented toward a specific problem or requirement. Only then it is possible to consider all perspectives, those of the respective employees as well as those of addressees, adequately. This way existing experience and knowledge as well as objectives or resistances, which in their entirety decisively shape the organizational culture, can be taken into account.

Openness and transparency in decision-making processes are essential in this context, especially regarding the introduction of new technologies or changed work-related and educational processes. Personal initiative and innovation must be valued and reflected upon, a positive way to deal with errors must be cultivated, and a constructive approach to ideas and criticism must be encouraged. In addition, it is important to provide testing grounds for new technologies. This allows employees to try out digital technologies in practice (Hofhues et al. 2020a, b; Helbig et al. 2020a, b, sc).

The reorganization of knowledge management that comes with the digitization presents a central challenge. In order to make knowledge accessible across departments and hierarchies, physical and digital spaces must be created for informal forms of knowledge transfer as well as specific times for formal knowledge transfer. In a differentiated educational organization, the networking of stakeholders and institutions plays a decisive role in order to bundle individual and collective experiences and to be able to exchange them sustainably and purposefully. Target and implementation strategies should be based on this bundled experience and developed in cooperation with external experts, so that an external view and subject-

specific expertise can be included. The choice of experts depends on the subject of the digitization efforts. They may come from the field of media education when it comes to educational work, competence promotion, or target group-specific approaches. Experts from the field of media didactics can provide support in designing digital learning settings. Marketing experts can promote social media work, and IT consultants can help to shape the technical infrastructure appropriately. Various digital tools can also be used in this context to enable cooperative, collaborative work with external parties (Hofhues et al. 2020a, b; Helbig et al. 2020a, c).

Furthermore, it is important to motivate employees toward further training and to provide enough resources for qualification in the context of digitization. The documentation of the experience and knowledge gained from the qualification is also essential for successful knowledge management. Online documents or Wiki systems are suitable for this purpose, which allow a certain amount of unification and standardization. This way the need to adapt the knowledge for different work areas and target groups is also taken into consideration. Collaborative tools and transparent knowledge databases offer a good approach here (Hofhues et al. 2020b; Helbig et al. 2020a, b, c).

### **1.6.2 1.3.2 *The Employees' Perspective***

A sustainable implementation of digital technologies in educational institutions especially depends on the fact that all participants, addressees, employees, and management personnel, with their individual needs, and not the digital technologies, are the focus of attention. Organizational development must always be thought from a human perspective (Hofhues et al. 2020a, b). The support needs of employees and managers are primarily in communication, administration, and teaching.

The advantage of new technical solutions in the field of communication is seen here in particular in the time savings through asynchronous communication. There is a desire for digital technologies for coordination, collaboration, and information gathering. This is also where the possibilities of mobile working are appreciated. Employees also expressed the wish for digital technologies as teaching/learning tools that can be used collaboratively, such as learning videos or learning management systems (Helbig et al. 2020c).

The wishes and needs of employees and their direct involvement in decision-making processes require a changed understanding of leadership and transparency between managers and employees. Transparency and clear communication help to put existing negative experiences into perspective and to reduce reservations (Hofhues et al. 2020a; Helbig et al. 2020b; c). The development of strategies can be based on the resources of employees by letting them work on individual and entrepreneurial needs or problems themselves and by incorporating the results into organizational developments. In this way they would take responsibility for their own development in a protected space, acquire problem-solving competence, and make approaches to solutions transferable.

In order to react to identified competence deficits among employees and addressees related to digital technologies, comprehensive qualifications must aim both at teaching digital technologies and at promoting media competence, problem-solving, and decision-making skills in the context of digitization. In addition to specific abilities and skills, qualifications must enable employees to adopt an attitude that enables them to shape future-oriented educational processes with, and possibly without, digital technologies. In addition, it is important to promote networking among people so that they can share their knowledge and experience and support each other (Helbig et al. 2020a, c). Personal relationships between employees and face-to-face communication are still important. Individual and collective identification with developments is increased by employees qualifying each other. The human factor is of key importance here. This should also be reflected in the mission statement and quality policy of an educational organization. Employee-oriented action means transparency and openness in order to strengthen satisfaction and thus also the identification of employees and to take them along on the way into the digital age.

### 1.6.3 1.3.3 *The Media Educational Perspective*

In (vocational) educational institutions, digital transformation requires, among other things, the promotion of media competence appropriate to the addressees, its sustainable anchoring and the implementation of digital media in organizational processes, and thus the work-related digital competence aimed for in #ko.vernetz. Digital media should be used as tools, and their significance in educational processes should be reflected upon, but media competence should not be reduced to technical-functional aspects. #ko.vernetz not only conveys technical possibilities but also initiated reflection processes on media-initiated changes in educational practice, addressed ideas of digital education, and strengthened the employees in their flexibility and ability to cope with everyday demands. Throughout the project, the organizational units of *Kolping-Bildungswerk Paderborn* have thus shown an increased interest in the subject area of digitization. The employees have recognized that digital transformation entails profound and above all long-term changes for the organization. They want to participate in shaping these changes and to be accompanied in doing so.

From a media educational perspective, a central problem arises which becomes particularly clear in the context of vocational training: the normative narrowing of the concept of media competence to economic interests, training, and occupational skills or technical skills. This narrowing ultimately limits the effectiveness of media education offerings to an economic usability that neither is in the true sense of the addressees nor adequately incorporates their perspectives. The promotion of media competence must enable people to lead a confident and self-determined life in a mediatized society. Aspects of personal development and social participation must be given priority over purpose-rational qualification, efficiency, and technical skills.

However, the question is how far central objectives of media competence from a media education perspective – such as a confident way of living, political participation, or a critical approach to media – can be part of work-related media competence promotion. Although the project *#ko.vernetzt* took into account overarching objectives through the approach of a work-related digital competence, the actual promotion was also focused on the qualification for certain fields of work. Only by dealing with digital change and the critical reflection of social changes could central objectives of media education be taken into account.

This means first and foremost promoting the qualification and communication of employees and involving them in development processes. It also requires dialogue between managers, employees, and experts in the various digitization fields. The organizational development that goes hand in hand with this also means a change in culture in order to meet the requirements of a new digital education, which places fundamentally new demands on people in vocational training institutions and their ability to actively participate in the digital transformation process.

The qualification measures have therefore taken up the topic of digitization and an attitude toward developments. Also, in this context certain digital tools brought together knowledge acquisition and capability to act. Familiar ways of communication and working could thus be adapted to the requirements of digitized education, and even skeptics could be motivated to redesign education. In the process, four focal levels at the interface between media education and the digitization of education and educational institutions have emerged, in which the questions and topics of the employees can be found, and which can be identified as central fields of action in the context of digitization:

#### Level 1: Organization/structure

- Influences in the context of digitization on the structure of the institution/department.
- Influences in the context of digitization on the structure of the entire organization/holding.
- Technical infrastructure and technical access requirements in facilities.
- Digitization in the field of administration and corporate communication (internal and external).
- Tracking of participation in online offers, online evaluation of educational measures.

#### Level 2: Educational work/pedagogy

- Digital tools for educational work.
- Media didactics, learning settings, new educational spaces in the context of digitization.
- Learning platforms, learning management systems (LMS).
- Inclusion and integration, diversity of content and media (pictures, videos, etc.)
- Technical admission requirements for participants in training measures.



### Level 3: Content with media reference

- Social relations in mediatized worlds, media worlds, mediatized living worlds.
- Concepts and topics related to digitization, media ethics, and media education.
- Prevention and protection of minors in the media, risks associated with media.
- Data protection, personal and image rights, personal data.
- Media handling of different target groups/generations, intergenerational media work.

### Level 4: Marketing/social media

- Digitization in marketing and public relations.
- Digitized target group approach and target group acquisition online.
- Social media and new forms of communication and expression.
- Target group-specific and life-world-oriented online address.

While levels 2 and 3 explicitly touch on media education, many of the aspects of organizational development (level 1) and social media marketing (level 4) articulated by employees require other disciplines and external experts for professional discourses. A professionalization of media education also requires being aware of this fact and focusing on central media education topics and approaches (see also Schmidt-Hertha and Rohs (2018)).

## 1.7 An Interim Conclusion: #ko.vernetzt as Pulse Generator

The project-network *#ko.vernetzt* was set up, among other things, to reflect on questions of digitization in dialogue with employees, to link them to positions from science and society, and to feed back insights into the development of educational work and the organization. However, numerous challenges for research and practice arose, which could only be solved to a limited extent. It was not possible to transfer the ideas of local employees and management via the multi-stakeholder dialogues to the extent that would have been desirable. Existing structures seem to be too inflexible, because they are too strongly enshrined in the organizational culture. In addition, dialogue requires transparency and openness, which are understandably less easy to achieve in a holding company than in other education sectors that are less dependent on competition in the education market. There was greater potential in the surveys of the different needs and ideas (see Chap. 3 in this volume), because here empirical results could be collected that are better suited to the argumentation of development processes within the logic of economic exploitation. Nevertheless, a transfer of the findings was possible both in the various dialogue formats and in the context of the qualifications, in presentations of interim results, and in the dialogue between project coordination and project stakeholders. The project *#ko.vernetzt* has thus set clear impulses which – even if outside the actual project work – have promoted processes of digitization of educational work in *Kolping-Bildungswerk*

*Paderborn*. However, the corresponding processes need a lot of time and a trusting, cooperative collaboration. The degree of independence that the participants are expected to have plays a decisive role in this context. Only if the individual employee is able to follow the individual steps a feeling of “sovereignty” in dealing with digital media can develop. At the same time, this enables employees to be motivated to become actively involved in the digital transformation of the organization. Qualification measures were therefore the more successful, the more precisely the content and methodological approach were tailored to the participants’ requirements. Even if only a very small part of the employees of *Kolping-Bildungswerk Paderborn* could be involved during the project duration, those who were qualified will pass on their experiences and integrate them into their daily work and thus arouse the interest of the rest of the employees.

Until the end of the project, various further externally funded projects (separate from *#ko.vernetzt*) and digital transformation processes have been initiated in *Kolping-Bildungswerk Paderborn* and with different cooperation partners. In the inclusion hotels, learning videos were used, individual multipliers started a series of webinars, an inter-institutional working group has come together to develop a social media concept, virtual courses were set up in vocational education, a system for knowledge management was established in *Kolping-Bildungszentren Südwestfalen*, media development plans were drawn up in *Kolping-Schulwerk Paderborn*, and at the holding level, a new consultant position was set up to initiate and carry out further digital projects. All these activities have also been made possible by impulses set in the context of *#ko.vernetzt*.

The project’s specific approach and the fact that it is situated between research and practice make recommendations for action possible that will provide the professional discourse with an impetus for a media educational perspective on vocational training in the whole organization. Field reports and reflections will be freely published on [www.koernetzt.de](http://www.koernetzt.de) after the end of the project (06/2020). On the one hand, these can contribute to the further development of vocationally oriented media competence promotion and, on the other hand, to new media educational concepts which, in the sense of a broad, value-oriented understanding of education aim at digital empowerment, fulfill the requirements of a new digital education, which places fundamentally new demands on people in vocational training institutions. The involvement of employees in entrepreneurial strategies for digitization plays a central role in this context and promotes their feasibility. These strategies must be carried out by using participative instruments and methods for the media-supported articulation of employee interests. The prospect of promoting one’s own skills and projects as well as qualifications appropriate to the target group through close cooperation between employees and experts also promotes a high level of security and a feeling of “sovereignty” in dealing with media and technology and at the same time motivates employees to become actively involved in the transformation of the organization. Better vocational training and continuing education based on future-oriented qualified educational employees can ultimately lead to higher job satisfaction, future viability, flexibility, and efficiency of the target groups in their professional lives.

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