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Realizing Decent Work in a "Sandwich" Position: Assessing VET Trainers' Working Conditions in Times of Multiple Transformations

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Abstract

Context: The German vocational training and education (VET) system is designed to cope with change. Within this system, organizational VET trainers (OVETT) are the main persons of reference for apprentices in the organization, in most cases for the whole three-year training period. Whether training can help to realize or maintain decent work also depends on whether the trainers themselves have decent working conditions.

Approach: The empirical foundation for our analysis of the situation of OVETTs and the challenges they face in transformative times is a recently conducted study. Using a mixed-methods research design, consisting of 28 qualitative interviews and an online survey completed by 1,004 organizational VET trainers, this study analyzes the working conditions of German VET trainers and assesses possible effects on decent work.

Findings: We show that although there is a willingness on the part of OVETTs to handle change and transformation, they are not sufficiently involved in their companies' strategic decisions. Our data shows that some OVETTs perceive themselves as being in a potentially influential position. Many, however, report that they are only the object of change instead of participating and contributing their competencies and opinions. The data shows the extent to which the work of vocational trainers is affected by stress, conflicting demands and a lack of support. This is particularly true for part-time trainers who, in addition to their normal

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work, are also responsible for the success of the apprentices and the entire VET system. However, the high intrinsic motivation of trainers enables them to fulfil their tasks and meet the high expectations placed on them.

Conclusions: A special aspect of this is the "sandwich" position of OVETTs, who face transformative, societal demands, and challenges from both below (i.e., from the apprentices) and above (i.e., from management). At the same time, there is a lack of structural and operational resources. Organizational changes expose them more directly to certain challenges, but do not give them a chance to help shape their own conditions. Although the VET trainers are accustomed to mastering different requirements and interests, in transformative times new challenges arise and intensify the already heavy burden on VET personnel. If these are not addressed and VET work is not organized as decent, this will also jeopardize the quality of the vocational training system in the medium term.

Keywords: VET, Vocational Education and Training, Trainers, Decent Work, Transformation, Germany

1 Introduction: Organizational VET Trainers, Transformation, and Decent Work

The German vocational training and education (VET) system is internationally recognized as a successful system, not least because of its contribution to the realization of decent work. For decades, vocational training has ensured decent work for employees (Do et al., 2023; Streeck, 1997): VET enables long-term integration into the labor market, lays a solid foundation for lifelong learning and personal development, and provides secure and well-paid work even for employees without university degrees (Bosch, 2018; Pfeiffer, 2016). Although the VET system is often seen as a relic of the "old" economy and the industrial era, time and again it has proved to be transformative and innovative, incorporating new subjects and helping to modernize working life (Thelen, 2014).

This is also true in periods of multiple transformations, as vocationally trained employees have proved to be a resource for companies' innovation and economic success (Backes-Gellner & Lehnert, 2021). On the one hand, this seems to be the case within the *digital transformation*, e.g., in coping with and enabling Industry 4.0 (Pfeiffer, 2018), or even in deploying artificial intelligence in maintenance or people/business analytics (Herrmann & Pfeiffer, 2022; Pfeiffer, 2021). On the other hand, VET plays an important role within the *ecological transformation* (Becker et al., 2022) and is thus seen as an integral part of Agenda 2030 and its Sustainable Development Goals (SDGs; McGrath et al., 2018).

Transformative dynamics, however, unlike "normal" social change, do also have the potential to endanger the institutional conditions that enabled them in the first place (Polanyi,

2002; Reißig, 2009) – this is all the more true for an economic system that considers living labor a cost rather than a resource (Pfeiffer, 2021). So, it is by no means self-evident that the VET system, as an enabler of transformation as well as a producer of decent work, will still be a living and functioning institutional system at the end of these multiple transformations. Institutional systems, however, come to life where people bring them to life: Not by means of formal structures, but in everyday activities on the company level.

Unlike other systems, German dual education takes place in two learning venues: Schools and companies. In this context, a particularly central but often underestimated actor and guarantor of the VET system, and one that has received little attention in research, is the trainer in the company (Bahl & Schneider, 2022; Nicklich et al., 2022; for other countries see Hofmann et al., 2014; Marrero-Rodríguez & Stendardi, 2023).

VET personnel (in German: *betriebliches Ausbildungspersonal*) include in-company trainers both within companies and at inter-company training centers. Although both are responsible for carrying out practical training activities, we focus here on what we call organizational VET trainers (OVETTs), as they are the ones who incorporate the skills needed to cope with transformations into the vocational training system and give them concrete form. They are thus a key determinant of whether the VET system can be preserved beyond the current processes of transformation and can continue to provide the conditions for good and decent work in the future. The core subject of this article is therefore how transformation is currently experienced and managed by OVETTs in the German VET system. The empirical findings that will be presented, however, offer more than just an empirical look at these actors in the workplace. They also open up an empirical perspective on the question of how and whether decent work can be preserved across transformative times.

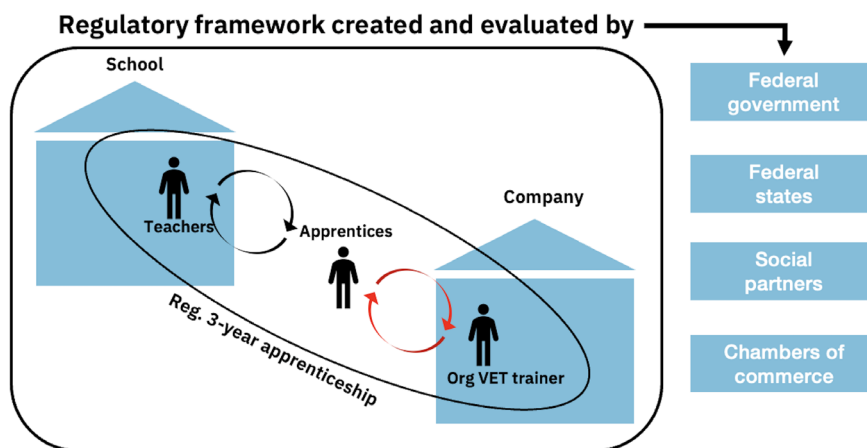


Figure 1: Position of Organizational VET Trainers (own source)

To understand the importance of OVETTs, a brief overview of the structure of the German VET system is helpful (figure 1; here we focus only on the main, traditional forms of VET; there are also VET programs that are primarily school-based, as well as inter-company training centers). The German VET system consists of two, intertwined learning venues: a) Vocational schools, which impart theoretical knowledge, and b) companies, where apprentices gain practical and experiential knowledge. For most of the occupations in which VET is offered, these are three-year programs, whose profiles and curricula are subject to constant change. The entire institutional system of vocational education and training is regulated by law and organized in a social partnership. In contrast to similar education systems in other countries, school takes up only roughly one third of the apprentices' time, with the rest of the time spent within the companies. For the OVETTs, supervising apprentices is often only one aspect of their job, and they spend most of their time going about their own work.

The empirical foundation for our analysis of the situation of OVETTs and the challenges they face in transformative times is a recently conducted study, in which we focused on the situation of OVETTs in the metal and electrical industry. The study consists of a mixed-methods approach, comprising more than a thousand organizational VET trainers surveyed online and 28 qualitative interviews.

We will show that although there is a willingness on the part of organizational VET trainers to handle change and transformation, they are not sufficiently involved in their companies' strategic decisions. Our data shows that some organizational VET trainers perceive themselves as being in a potentially influential position. Many, however, report that they are only the object of change instead of participating and contributing their competencies and opinions. Practical knowledge, cultivated through experience within the organization, is not only a coping mechanism for change (Böhle et al., 2004) and a carrier of institutional legacy and thus stability (Carey et al., 2019), but also an important resource for generating transformations (Pfeiffer, 2018). As the dual VET system relies on the front-line involvement of the OVETTs, this is wasted potential in those organizations. As vocational education and training plays a crucial part in the creation of decent jobs (Do et al., 2023), this has considerable effects on the decent work of OVETTs themselves, thereby undermining their pivotal role in guaranteeing decent work for others.

By examining these issues, we help to shed light on the "sandwich" position of organizational VET trainers and "the interplay between organizational context and the actions and interactions among individuals" (Vogus & Rerup, 2018, p. 228). Using the example of organizational VET trainers, we explore how the trainers in these positions "engage with performance pressures or may feel caught between strong forces and without agency" (Gjerde & Alvesson, 2020, p. 147). *Part two* first looks at the relationship between vocational training and decent work, and at the role of organizational VET trainers in this context. *Part three* offers a conceptual discussion of the role of trainers in maintaining the company's social order

and of their significance for decent work in the context of transformation. *Part four* introduces the methods and data of our mixed-methods study. *Part five* provides a broad variety of data and results to illustrate the strains and challenges OVETTs experience in enabling and coping with the process of transformation, and the consequences of their own decent work for those whose VET training they support. Finally, *part six* discusses the empirical findings on trainers, decent work, and transformation in comparison with the conceptual considerations in the introduction.

2 Vocational Training and Decent Work

The International Labour Organization (ILO) uses the term "decent work" to encompass issues of payment, health and safety, and social security, but also aspects such as co-determination, participation, and laying a foundation for decent work through training, qualification and education. For the ILO:

Decent work sums up the aspirations of people in their working lives. It involves opportunities for work that is productive and delivers a fair income, security in the workplace and social protection for all, better prospects for personal development and social integration, freedom for people to express their concerns, organize and participate in the decisions that affect their lives and equality of opportunity and treatment for all women and men. (ILO, 2024, para. 1)

The role of work in society means that these aspects have profound implications for the lives of individuals, organizations and society (Blustein et al., 2023). Decent work is closely related to organizational climate and also to mental health (Ruzungunde et al., 2023). Fundamental principles and values at work, as well as appropriate working hours and workload, are essential dimensions of decent work and have a significant negative correlation with burnout (Dinis et al., 2024). A recent meta-analysis of 48 studies on decent work identifies job and life satisfaction as especially important for decent work (Nourafkan & Tanova, 2023). But although there are some studies on the dimensions of decent work for apprentices (e.g., Zambelli et al., 2024), the working conditions of OVETTs have rarely been the focus of empirical studies to date.

Although the policy level – i.e., the political regulation of work – is crucial for the question of decent work, different levels need to be taken into account, as "organizations are spaces and places of work" (Delbridge & Sallaz, 2015, p. 1449). This means that the company level is central for looking at aspects of decent work – though the interdependence of the different levels should not be overlooked. Vocational training and apprenticeships are embedded in a system of socioeconomic institutions (Busemeyer & Trampusch, 2012). For example, there is a close connection to collective agreements. These institutions support and reinforce each other through mutual referencing (Busemeyer & Iversen, 2012; Streeck, 1991). Although it

seems to be a limitation for companies due to the institutional setting, the training system leads to economic success; the international success of German companies is based not least on the qualifications of skilled workers (Streeck, 1991, 1997). Accordingly, companies are willing to pay higher wages and to invest in the qualifications of their employees. This then ultimately pays off in economic benefits, in accordance with the concept of "beneficial constraints". Conversely, this also goes hand in hand with a relatively higher level of decent work for employees. In this context, vocational education is considered a prerequisite for decent work (ILO, 2017), but what is the prerequisite for good vocational education?

A central building block for this is certainly the OVETTs (Nicklich et al., 2022). The OVETTs perform a central social task by preparing young people for future working life and the possibility of decent work (Baethge et al., 1980). Due to the dual nature of the system, the aim is to build skills that can be used by employees beyond the concrete learning environment. Hence the OVETTs' task is also to build up a certain autonomy and independence among employees. This is the foundation needed to secure access to decent work. While it might seem at first glance that the interests of the company and OVETTs are aligned, it cannot necessarily be assumed that this is the case (Baethge et al., 1980). However, OVETTs are indispensable in the implementation of in-company training, and the complexity of the constellation of interests must be taken into account when it comes to examining the impact on decent work (Gahan & Pekarek, 2013). This can be attributed to the fact that – in contrast to purely school-based training – economic development and the company's market position and work organization play a role in the design of the training (Baethge et al., 1980). Vocational training is also a special resource for innovation as the basis for decent work and for social participation. The German system of dual vocational education and training has proven its worth in securing this for companies and employees in the long term – precisely because of its institutionalized processes for negotiating the necessary content. To date, OVETTs have played a central role in bringing dual training within companies to life and thus made an important contribution to ensuring decent work (Do et al., 2023). Yet this tried and tested approach faces new challenges in transformative times.

3 Transformations and the Organizational Position of OVETTs

Diverse changes may undermine these constellations and power relationships and thereby affect the conditions of decent work. Baumgartner, for example, emphasizes that new work and organizational concepts in the late 1980s significantly changed the requirements for in-company learning. This has led to discussions and assumptions about new, changed roles of OVETTs. Thus, the situation as a whole has become more complex, and employees have to cope with novel and unpredictable problems independently, as well as shaping learning

conditions (Baumgartner, 2015). Against the backdrop of multiple upheavals and transformations, the constellation seems increasingly complex (see also part 5).

However, these transformational changes are usually mediated by the conditions in the organizations. Institutional systems come to life where people bring them to life – not by means of formal structures, but in everyday activities on the company level. This includes transformations that affect the company's social relations. This means that the extent to which decent work is realized – for and through the activities of OVETTs – depends not least on the constellation of relationships and the position of the trainers. To conceptualize this, we draw on the notion of a company's social order (*betriebliche Sozialordnung*), which focuses on the company as a social space (Kotthoff, 2023, 2005). The approach addresses the fundamentals of social integration into the company, which goes beyond the formal bond of the employment contract. Here the concept has links to recognition theory and emphasizes that, in addition to remuneration, appreciation at work also plays a central role. The idea is that even in strict work contexts, a certain degree of voluntariness on the part of the subjects is necessary for the work to be performed. In this context, consideration is given to interactions, norms, and compromises that enable or hinder social integration. It is a question of the relationship within which power is exercised (Kotthoff, 2005).

The concept of the company's social order is concerned with the encounters of subjects in search of mutual recognition. This is not about an individual exchange, but rather about collective patterns of interpretation and norms of reciprocity that affect the entire company – even if they are only related to subgroups within it. In addition to the performance regime, management practice, and institutionalized representation of interests, the company's social order encompasses issues of employment and HR policy, including questions of vocational training. The concept works on the assumption that the company is a social entity in which arbitrary subjects are integrated, and that certain roles go hand in hand with particular identities. It is about mutual recognition, and the establishment of cooperation, consensus but also conflict, and opportunism (Kotthoff, 2005). Different studies have therefore created typologies of specific company social orders.

The position of OVETTs in this company social order is usually not explicitly addressed in this context. When we do begin to explore these questions, we find structural parallels to middle management. Like middle management, OVETTs are situated in the "sandwiched middle". Often studies do not take into account this specific position:

Only a few studies (...) take an in-depth case approach to this middle-levelness and touch upon the Janus-faced aspects of this experience. Just like the ancient Roman god Janus, who had two faces, allowing him to face two opposite ways at once, middle managers have to face two directions and deal with both superiors and subordinates. (Gjerde & Alvesson, 2020, p. 129)

But it is precisely this "sandwiched" position that we need to take into account when examining the position of OVETTs in relation to apprentices and higher-level management.

Like OVETTs, middle management has a special position within the company hierarchy between the operating core on the frontline/shop floor and the top management (Gjerde & Alvesson, 2020; Harding et al., 2014). In this context, the role can be seen as a mediating or bridging one in relation to senior management and junior staff (Harding et al., 2014). Mills already referred to these features in his work on white collar workers in the 1950s (Mills, 1956). In particular, his comments on foremen allow comparison with OVETTs. Because of their position – as very close to the operational business – they are affected in a specific way by technical and organizational changes. As a result, recognition and tasks change quite substantially (Mills, 1956, p. 88). As in the case of more general discussions on middle management, which focus on different forms of knowledge associated with the middle position (Delmestri & Walgenbach, 2005), Mills emphasizes the experiences of foremen, who come under pressure during organizational or technical changes: "The old functions of the foremen are no longer embodied in any one man's experience but in a team and in a rule book" (Mills 1956, p. 88). So even in the 1950s, the transfer of knowledge and institutional grounding was a central issue for this position.

Existing studies that address the role of middle managers in relation to employee involvement also deal with important aspects that affect the company's social order (Fenton-O'Creevy, 1998; Floyd & Wooldridge, 1992). These studies emphasize that both the extent of employee involvement and the role of middle managers depend on the coordination of different organizational processes. Studies have clearly shown that a lack of clear communication and transparency about the consequences of change, or the failure to make necessary changes in organizational processes, result in resistance at middle management level (Fenton-O'Creevy, 1998). Studies also focus on the involvement of middle managers in strategic processes, in particular on the interrelationship between top and middle management in strategy formulation and in actual implementation (Floyd & Wooldridge, 1992). In both cases, organizational constellations are emphasized, thus indirectly referring to the corporate social order. However, it remains to be seen to what extent this position brings opportunities for action or makes agency possible. This differs significantly according to the organizational constellation:

We find the middle manager as superior, who identifies upwards and with being a leader, who wants to improve performance and uphold pressure, and who experiences the agency to do so. But we also find a head who simply feels s/he is one of the middle people in the hierarchy, caught in the chain of command, unable to do much protection, and forced or inclined to follow the pressure from above and from within the profession. And third, we find heads who see themselves as umbrella protectors, taking the side of subordinates, in particular junior people, and who identify as 'middle down-up' people with agency to influence and engage in protection. (Gjerde & Alvesson, 2020, p. 140)

Gjerde and Alvesson (2020) thus identify "performance drivers" and "umbrella protectors" as central subject positions of middle management—based on the degree of agency experienced. Ultimately middle managers also derive aspects of their identity from this (Gjerde & Alvesson, 2020; Harding et al., 2014). But this is not unproblematic, especially for the foremen, according to Mills. He argues that while the foremen are no longer part of the group of subordinates, promotion also seems rather unlikely: "Having arisen from the ranks of labor, he often cannot expect to go higher because he is not college-trained" (Mills, 1956, p. 89). But this also raises the question: "Who will look after the foreman?" (Mills, 1956, p. 89).

These issues seem relevant but have yet to be examined in relation to questions of transformation. This is interesting, not least because of the "sandwich" position of being the subject and object of control as well as resistance (Harding et al., 2014) and thus being able to take on the role of subject and object in transformation processes. It can be assumed that the company's social order will not remain unaffected by the multiple transformations, and that OVETTs, due to their middle position, will be confronted with multiple challenges and demands – from above as well as from below. This puts OVETTs in a position where they can, or even must, react to transformation. Yet this same position means that they cannot do so without restrictions.

4 Methods and Data

The gaps identified in the research, as well as the aim of providing a broad and detailed representation of the situation of OVETTs, called for a systematic mixed-methods approach. The mixed-methods approach applied in the study was initially designed as an embedded or nested approach along the lines of Creswell (2003). In the conceptual work around the questionnaire design and the related literature review, it quickly became apparent that this approach created blind spots, necessitating a more in-depth perspective on the target group of trainers. This was because it raised new questions that could not be answered solely by quantitative methods and had the potential to shed new light on the quantitative data. Instead of considering the qualitative survey only as a supplement to the large online survey, the eight to twelve expert interviews originally planned were expanded to 28, and the mixed-methods approach including the six instructor interviews was expanded into a multilevel model for both data collection and data analysis (see table 1).

For our study "Ausbildungspersonal im Fokus 2021" we therefore conducted an online survey, in which 220 variables were quantitatively recorded from 1,004 participants – this is one of the largest data sources for OVETTs in Germany. We specifically looked at the metal and electrical industry. This seemed a promising subject as it has a special significance for the economy and employment but also symbolizes multiple transformations and has great importance for the German training system. We also conducted 28 qualitative interviews with

experts in the VET field and experienced training professionals. Here we did not create case studies, despite the reference to the concept of corporate social order. This concept served mainly as a heuristics for making sense of the empirical material and the constellation of social relations in the companies.

Table 1: Overview Data (see Blank et al., 2022 for detailed information on the data)

Approach	Data
Quantitative	<p>Online survey of 1,004 full-time and part-time OVETTs in the metal and electrical industries</p> <p>60.3 % full-time, 23.4 % part-time and 16.3 % skilled workers providing training</p> <p>80.5 % male, 19.1 % female and 0.4 % other</p> <p>31.3 % younger than 40, 57.8 % between 40 and 60, 10.9 % over 60</p> <p>Survey period: May–July 2021</p> <p>Survey groups: In-company training personnel (trainers and skilled workers providing training)</p> <p>Focus: Working conditions, qualification and further training, relevance and recognition, role in transformation, digitalization</p> <p>Number of variables: 220 variables, including 18 open questions</p>
Qualitative	<p>Period: Late summer-fall 2021, after the quantitative survey, 28 interviews.</p> <ul style="list-style-type: none"> -Regulatory body (2) -Chambers of industry and commerce (3) -Social partners (8) -Management (2) -Works council (3) -Consultants (4) -Training staff in the electrical trade (1) -Training staff in the automotive trade (1) -Training staff industry (4)

Since the qualitative and quantitative surveys were conducted by the same research team, the two method strands could be closely interlinked. Thus, on the one hand – continuously and from the first results onwards – the evaluation of the quantitative data provided stimuli for the design (and continuous adaptation) of the interview guide. At the same time, impressions from the interviews and the initial results of the interview analyses could be used to interpret the quantitative material and to identify correlations whose relevance could not be fully deduced from the individual case.

The present article will focus primarily on questions concerning working conditions. This includes questions about the quality of work as well as the circumstances in which the OVETTs perform their duties. And even though we do not produce classical case studies, we use the concept of workplace social order (Kotthoff, 2005) as a heuristic to capture the relationships between workplace actors. By continuously "going back" into the data, we were able to get closer and closer to the research object (Kruse, 2014). The underlying interview technique followed a problem-centering approach, in which a conscious attempt was made to combine inductive and deductive steps. This differs from, for example, the non-directive narrative interview, in which the methodological approach is purely inductive (Misoch, 2019). Importantly, we entered the qualitative interview phase with prior knowledge of the quantitative results and the team discussions on the development of the questionnaire. This helped us to identify and categorize the most important results; it also gave us the opportunity not only to shed light on the challenges from the employees' perspective, but also to use our holistic approach to link this to employment conditions and decent work.

5 Transformation and Decent Work From the Perspective of OVETTs

In the following, we summarize some of the key findings of our study, focusing on three themes that describe the relationship between transformation and decent work from the OVETTs' perspective. First, we focus on the multidimensional transformations that OVETTs face and the consequences they experience. In the second subsection, we empirically illuminate the perceived "sandwich" position of OVETTs and juxtapose this with their self-perception and identity. The third thematic block brings together several ways in which decent work can be empirically captured for OVETTs. These include the contradictory work requirements experienced and the way they deal with their own expectations about the quality of work. Further figures show how strongly OVETTs are committed to VET training and their apprentices, how little their voice is recognized in the transformation process, and whether and to what extent they are appreciated for their work.

5.1 Multiple Transformations and the Consequences for Organizational VET Trainers

In our data, the increase in requirements and demands for the OVETTs and the VET system is formulated from the perspective of the trainers themselves. The respondents' quantitative as well as qualitative descriptions clearly show the diversity of these challenges and their connections to multiple transformations. This includes ecological, normative, and digital processes of transformation. To generate this data, we asked participants what they considered to

be the biggest challenges (up to three open responses). The open questions were categorized by a group of four people for all cases. This resulted in 10 noteworthy categories, which are shown in figure 2, in tiles reflecting the percentage distribution.

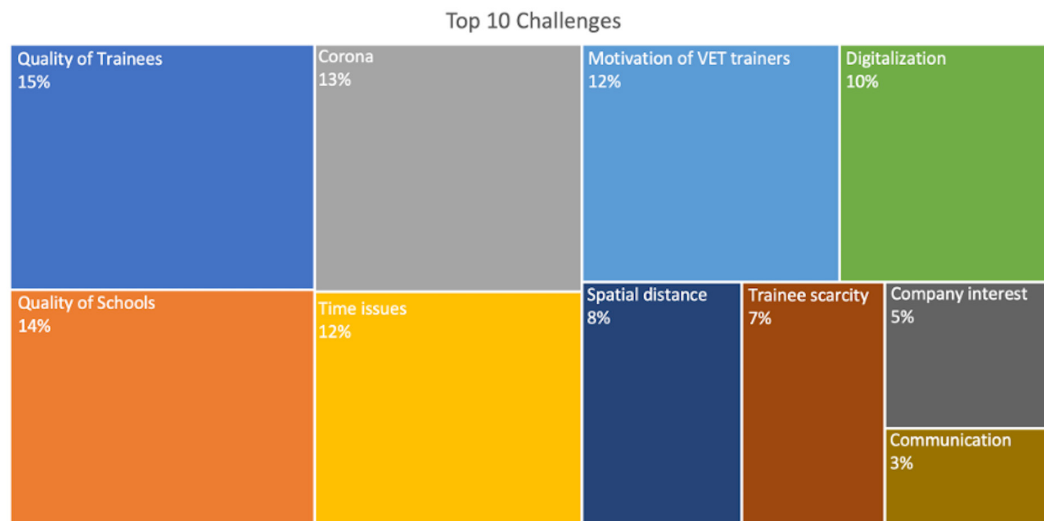


Figure 2: Top 10 Challenges for VET Trainers (own source, $n=1003$)

The most frequently mentioned category, at 15 percent, is the quality of the apprentices. If we add the scarcity of apprentices (seven percent), the issue of the supply of young talent is one that is often discussed in public. However, there are also changes resulting from the COVID situation, which is the third most frequently named challenge (13 percent) and is fundamentally different from the other aspects. The COVID pandemic is frequently mentioned as a central challenge and plays a role in various other dimensions (e.g., digitalization, distancing). A challenge mentioned frequently which is less present in the public debate is the trainers' relationship to and assessment of schools (14 percent). This is mentioned by a third of respondents and relates to school as preparation for training, but ultimately also to vocational school. Digitalization is mentioned by 10 percent of respondents. In view of the importance of this topic in the media and scientific and political debate, it is perhaps surprising that only just over 10 percent of respondents see this as a key challenge. However, other categories are also mentioned that can be related – if not directly, then indirectly – to the topic of digitalization. For example, distance (eight percent) and communication (three percent) between apprentices and trainers were cited as further key challenges. Two aspects relating to commitment to training were also mentioned. Almost 12 percent see trainer motivation as a key challenge for the future. But the question of company interest, which is mentioned by

five percent, is also seen as pointing to the future of the dual vocational training system and the work of OVETTs in particular.

This means that training personnel are confronted with challenges and demands from very different sides, and they have to deal with these directly in their work. This is also confirmed by a skilled worker who provides training:

In my opinion, the tasks [have] become much more multifaceted in contrast to earlier times up to the late 1980s, 1990s, because there the trainer really only had one task: To teach technical tasks, technical competence and to test these, and no one was interested in whether the apprentice fell by the wayside. (...) That's an impossibility today, it can't exist anymore. (AFK¹ _10_37_23)

5.2 "Sandwich" Position and Identity

In their daily work, due to their position within the company, OVETTs are often confronted with these transformative processes directly, which affects their own (decent) work. On the one hand, trainers are responsible for apprentices and have a close relationship with them; on the other hand, they are subordinate to departmental and senior managers. In this way, they help to ensure decent work for the apprentices. In order to assess the importance of OVETTs, it is worth taking a look at their structural integration into the corporate social order and the way their role and activities are perceived by others. The fact that interviewees named the motivation of OVETTs as one of the greatest challenges for the future makes the question of why people decide to become involved in training all the more relevant. Idealistic motivations can often be identified, which also points to the identity-forming aspect of the middle position. This strategic position is both the result of and the prerequisite for trainers' close relationship with the apprentices in the company – and for their generally understood responsibility for their trainees. Accordingly, over 95 percent of the respondents agree or somewhat agree with the statement that OVETTs make a significant contribution to the personal development of apprentices. The idealistic motivation is exemplified by an organizational VET trainer who, when asked why he worked as a trainer, responded:

Because it's just a lot of fun. You learn new things yourself, you keep evolving. And, of course, it's also nice to be able to help people in that way. (...) You need to have a certain level of enjoyment of it as well. Not everyone can do it, if they don't enjoy it, they probably shouldn't do it (...). I believe we're quite flexible in that aspect. And also, it's fun because it's so diverse. You're not just supervising apprentices, you have training sessions and other tasks. I think it's always a nice change of pace. (AFK_13_27_1)

¹ AFK = Ausbildende Fachkraft, skilled workers providing training without necessarily having a trainer certificate.

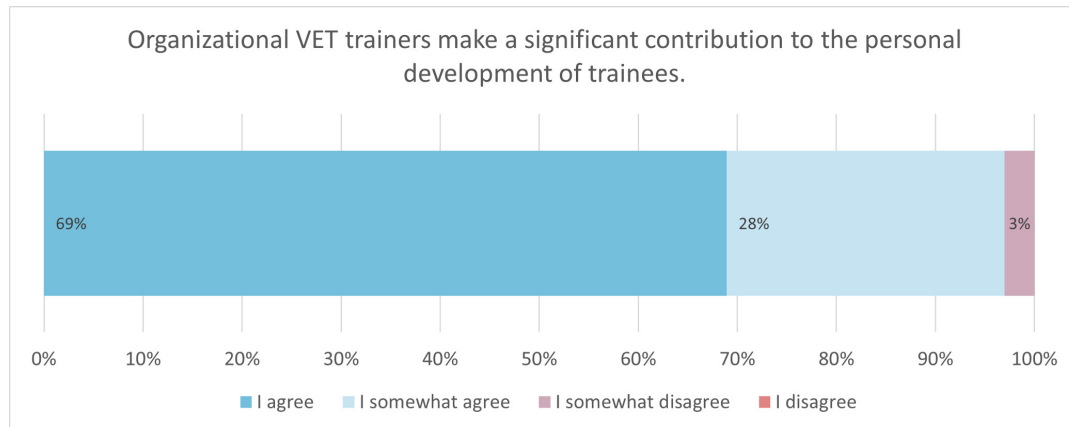


Figure 3: Contribution of VET Trainers to the Personal Development of Apprentices (own source, n=792)

What is more, apprentices frequently contact VET trainers outside of working hours: Only 20 percent of the trainers surveyed are never contacted by apprentices in their free time. This suggests that apprentices recognize the role and importance of VET trainers to them.

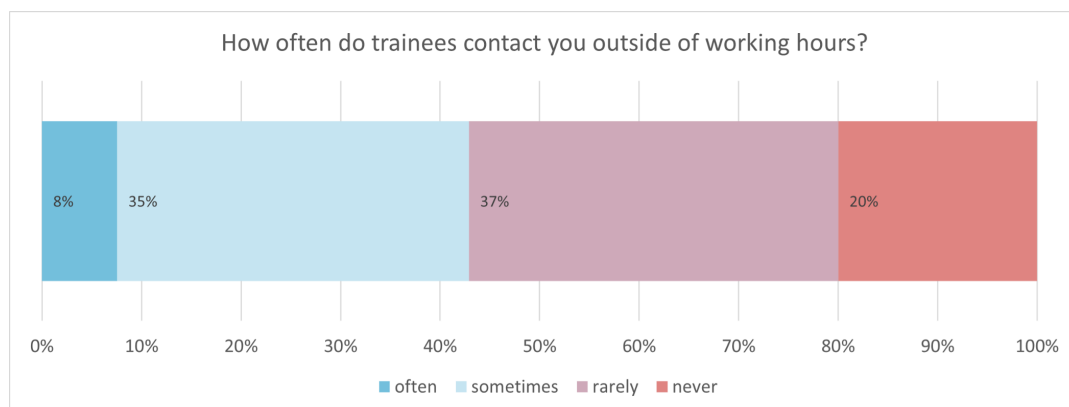


Figure 4: Contacted Outside Working Hours (own source, n=795)

These aspects point to the central position of the OVETTs within the company. The question is to what extent this changes over time and to what extent the position of OVETTs is maintained through phases of change. However, OVETTs' assessment of their own position is extremely positive. Some 82 percent of the trainers somewhat disagree or disagree that they themselves will be less important in the future as a result of changes.

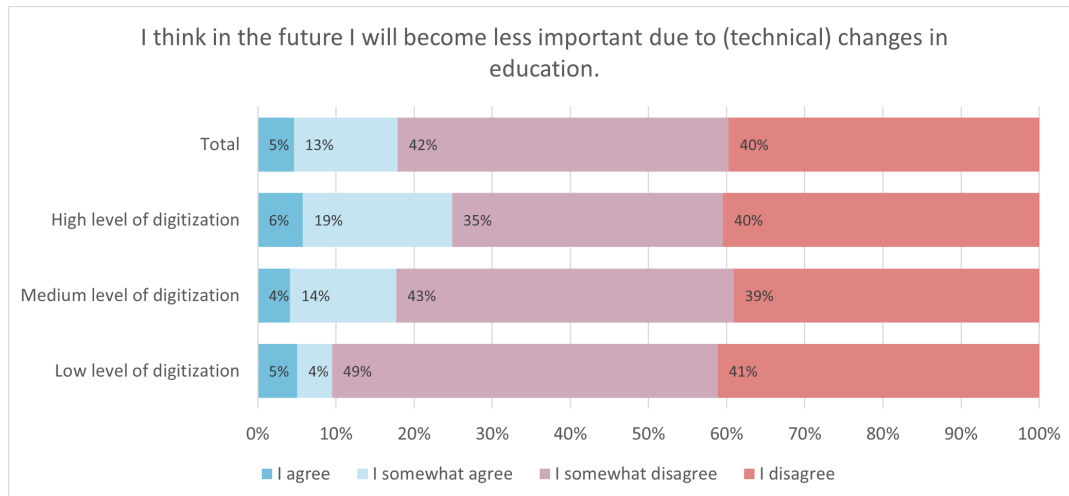


Figure 5: Importance of VET Trainers due to Technical Changes in Education (own source, n=760)

Ultimately, they are confident about their position in the company and see their own role as having a clear future. Nonetheless, 18 percent believe that their work as a trainer will become less important in the future. This figure rises to 25 percent (agree and somewhat agree) in more digitalized companies and falls to nine percent in less digitalized companies. Where more change is experienced and the potential of technology is more visible, this potential seems to be assessed differently. In some cases, trainers have already become aware that others in the company consider training to be less relevant during change. These figures at least suggest that where more change has taken place in recent years, there is more uncertainty overall with regard to the role and importance of OVETTs. The representative of a business association (*Unternehmensverband*) shares an observation:

I also believe that in education, one can see a shift, in which the training staff take on more of a moderating and coaching role, not just the instructive and explanatory one, though sure, elements of that will still persist. But there is room for a change in roles. As I mentioned earlier, young people are very open-minded, even towards these new topics, these new technologies. So, there's potential for role shifts, with apprentices teaching each other while the trainer (Meister) primarily moderates, [as well as potential] for new forms of education, new teaching methods, and a different setting. (UV_5_76_13)

However, despite their willingness to act as "umbrella protectors" (Gjerde & Alvesson, 2020) and the general openness on issues of motivation, the OVETTs are still dependent employees and are integrated into organizational contexts – with their company's social order and related resources.

5.3 Contradictory Demands and Decent Work for Organizational VET Trainers

Despite their general confidence in their role, an examination of the OVETTs' working conditions shows that contradictory demands caused by different roles and the resulting "sandwich" position in the company bring different burdens. An obvious expression of this position is the conflicting requests made of OVETTs. With regard to working conditions, it is clear that contradictory requirements as a consequence of different roles in the company result in stress. This is the case, for example, when other tasks have to be performed in addition to the actual training activities.

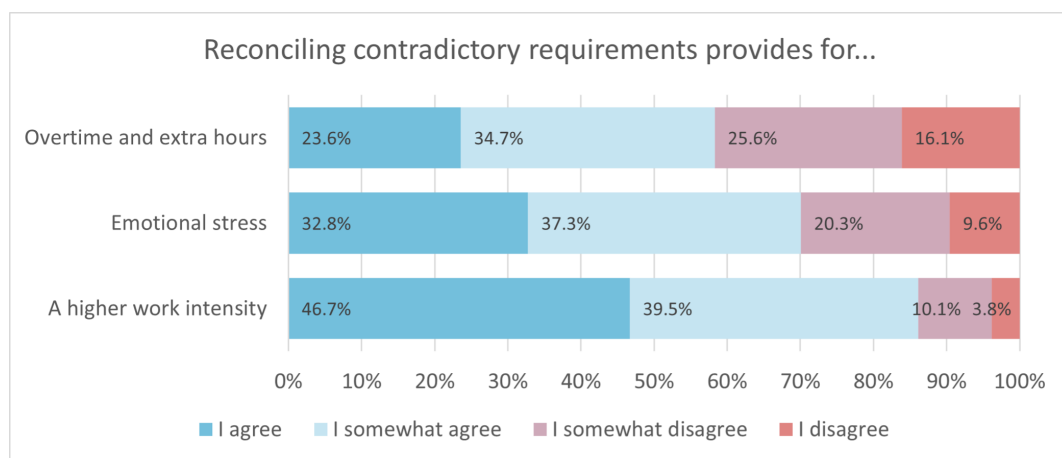


Figure 6: Contradictory Requirements (own source, n=949)

This ultimately leads to overtime, emotional strain, and a higher intensity of work. For instance, 58 percent of respondents agree that conflicting demands lead to overtime or extra work. This becomes even clearer with regard to emotional stress and a higher intensity of work, which are experienced by 70 percent and 86 percent respectively. Given these contradictory demands, one organizational VET trainer states: *"I think it's more the case that the requirements in production are more in the foreground when the going really gets tough"* (HA_5_49_23). At such times vocational training activities are subordinated to other requirements formulated by the organization/other organizational requirements.

These conflicting demands not only affect individual working conditions, but also have a direct impact on the design of training, since a balanced relationship between training and other activities ultimately also serves to maintain quality in training. In line with this, 45 percent of respondents very often or often have to compromise on the quality of education in order to reconcile conflicting requirements (figure 7). This is a problem not only

from the perspective of the OVETTs, but also from that of the company and – even more so – from that of the young people undergoing vocational training. If stress frequently leads to an impaired quality of training, the OVETTs' role as guarantors of decent work has to be questioned. At the very least, their own decent work is clearly endangered. As a works council member puts it:

Because the performance pressure on people, or – not only performance pressure but pressure on people has increased in general. And it's a relatively simple calculation: I have a certain amount of working time available, and I have my tasks in front of me; if I add tasks but the working time remains the same, something will suffer as a result. (BR_8_38_2)

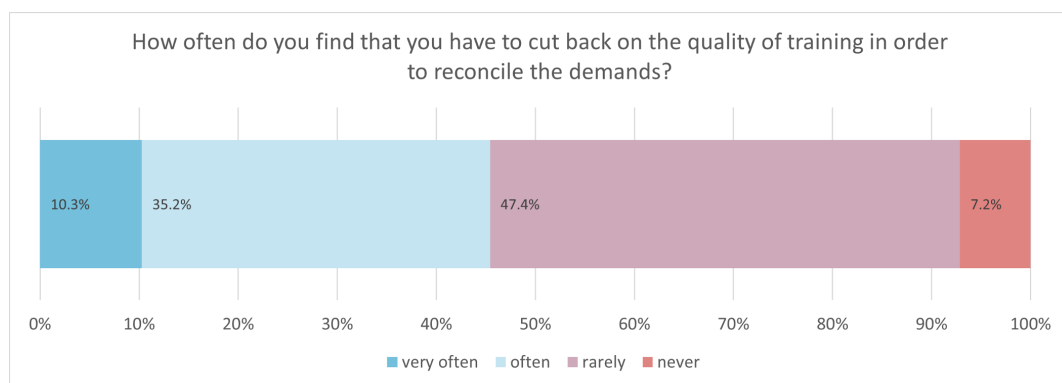


Figure 7: Quality of Training (own source, n=999)

And a look at the correlations also shows the following: If there are contradictory demands, this results in higher work intensity, emotional stress, and extra work/overtime. In addition, it shows that when conflict is present, the perceived value of the training activity is also negatively affected.

However, it is not only the actual work situation of the OVETTs that needs to be taken into account. Because of their potentially central position in the transformative processes, questions about their involvement in decision-making – and thus their relationship to higher-level management – must also be asked. Although direct participation and influence on working conditions is formulated as a central pillar of decent work, we see that involvement in decisions relevant to vocational training is problematic from the OVETTs' point of view. The same goes for the information provided to trainers by their companies. For example, around 50 percent of respondents are neither informed in time about decisions, changes, or plans concerning transformative processes, nor are they involved in them. This is attributed to the fact that the question of education is subjected

to economic logic, and that trainers are not a significant factor in this equation. An AFK explains:

Every company has to watch its budget, but if you want to develop education effectively and stay future-oriented, it's impossible without investment. That's what I've missed all these years here. There is actually a trend towards change now because I personally have strongly advocated for it. And that's indirectly related to appreciation. When employees who have been doing their job for so long raise concerns and request action, and nothing happens for years, it's a clear sign: The competence and attitude of these employees are not being valued. (AFK_10_53_25)

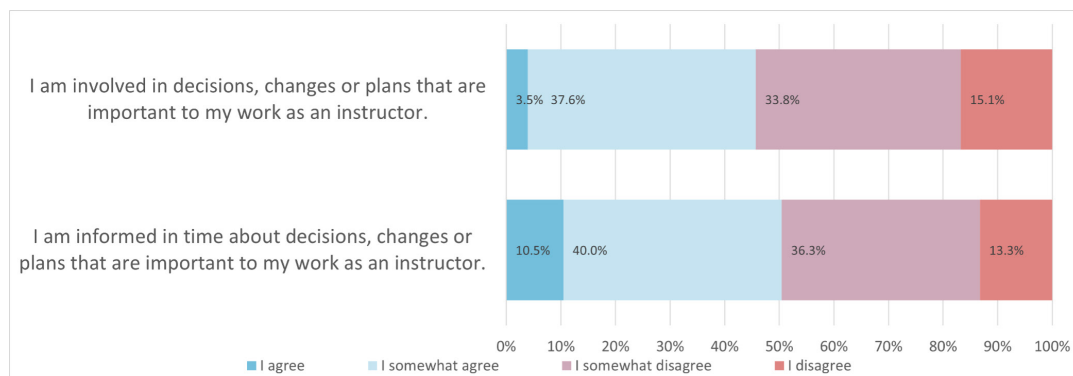


Figure 8: Involvement of Organizational VET Trainers (own source, n=755)

However, perceptions of the weight carried by trainers' opinions differ according to the actors. While 86 percent of the instructors still say that they feel that their opinion has weight within their own team, this agreement drops with regard to other actors. Only half (50 percent) of the trainers think that their opinion is relevant for management, and less than half of the survey participants believe that their opinion matters to industry associations (45 percent), trade unions (40 percent), and external training providers (27 percent). There is a difference not only in the amount of appreciation shown, but also in the ways appreciation might be expressed:

Here, there are two perspectives to consider. From the standpoint of the colleagues, often the role of the trainer holds a highly regarded position within the company. From the management's viewpoint, it's often seen as if the willingness to invest in training is equivalent to, or implies being equivalent to, the level of appreciation from the company's leadership or management. (...) In this case, the lack of investment or rejected requests for training is essentially equated with the level of appreciation. However, among colleagues, I must say, and this is manifested during conversations, trainers are highly regarded. Some even say: 'Look, I learned from him, he trained me.' That creates, I would say, a genuinely positive relationship among some colleagues. (BE_8_61_1)

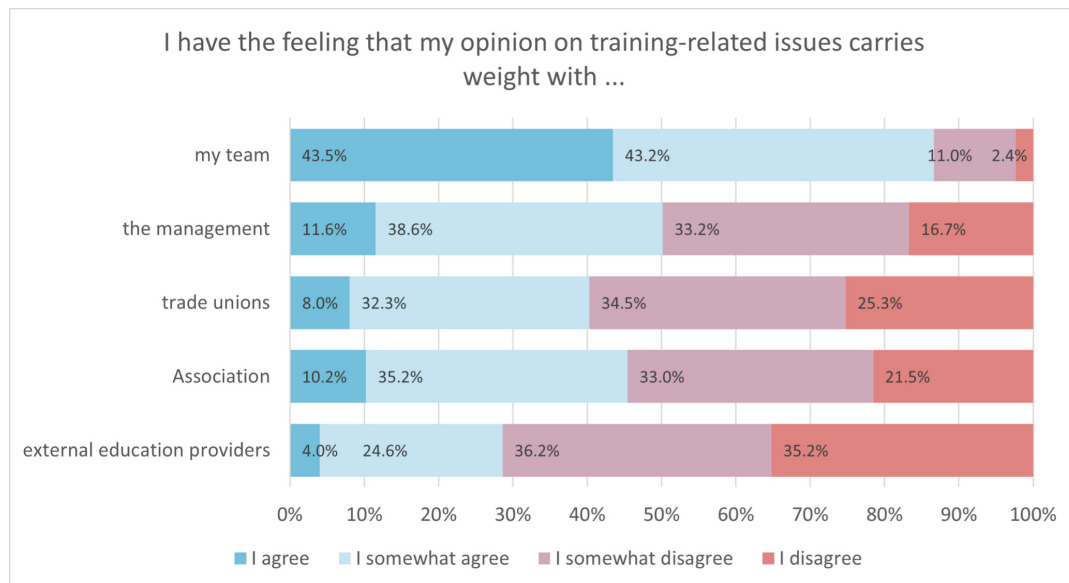


Figure 9: Opinion Carries Weight (own source, n=764)

The question of efficacy is also closely linked to the feeling of being appreciated. This appreciation is expressed not least in financial terms. However, while more than 85 percent of respondents believe that their training activities should be additionally remunerated, only a small proportion of respondents receive such remuneration. In addition to compensation, other factors play a role in appreciation, as confirmed by the statement of a trainer: *"The greatest appreciation is not in the thank-you, but in the measures for further improvement. Yes? When you get together and are heard, then you feel valued"* (AFK_5_193_1). It is therefore clear that one way to make OVETTs feel valued is to involve them in decisions about training. This means that opportunities for co-determination can be understood as an expression of appreciation.

The question about appreciation once again confirms the close relationship between OVETTs and apprentices described above: 95 percent of the trainers feel that their work is appreciated by the apprentices. 70 percent feel appreciated by the company in general, but it is striking that this is 25 percentage points lower than in the case of the apprentices.

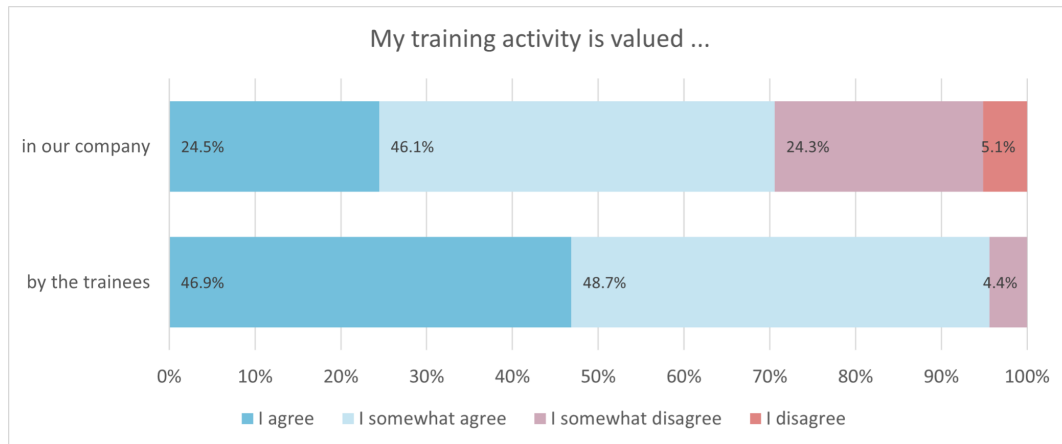


Figure 10: Appreciation of Training Activity Within the Organization (own source, n=755)

A skilled worker who provides training expresses this as follows:

Of those you train, or let's say when you do a training course, also design engineers, many say thank you, or, it was good, or something like that so you get that sort of feedback. You get less feedback from apprentices than from designers or draftsmen who are already in the profession. And from ... well, from the supervisor or from the training supervisor, no. You don't really get any feedback or any official appreciation or thanks for doing this. (AFK_13_95_1)

This lack of feedback in the organization is then also expressed in the fact that about one third of the trainers do not feel that they are taken seriously when they make suggestions.

The use or acquisition of experience and resources on the part of the OVETTs is seen by various actors as central to dealing with multiple transformations and maintaining decent work. But while we have already addressed the consequences for the quality of training, we have not yet considered the consequences for trainers and their commitment to the training system. The data show that the increasing demands placed on trainers constitute a fundamental challenge for their commitment to training. This means that commitment itself appears to be a future challenge. It seems that motivation can be a fragile resource, and that companies should not rely on the fact that there are always enough people committed to training for idealistic reasons. However, motivation is affected not only by appreciation at company level, but also by society's perceptions of training and trainers – and of course monetary incentives. At present, however, the OVETTs seem to be seen as a group affected by changes rather than as an entity capable of shaping the emerging transformations. This is more than just wasted potential – it also leads to a direct loss of future potential (Böhle et al., 2004) and even restricts the accumulation of future experience due to a lack of participation by VET trainers and apprentices alike. As a works council member sums it up:

I believe there are many creative ways in which training could be improved in light of digitalization, but there's often a lack of resources, in terms of either time or finances. (...) When I look at other trainers, they want to improve but can't because they don't receive the commitment or support they need. (BR_7_20_10)

6 Discussion and Outlook

Despite a quantitative decline and some serious challenges (Thelen, 2007), VET is still considered a special model for realizing decent work and an important factor for social mobility, integration, and innovation. A key pillar is the company as a learning venue and the group responsible for providing training, the OVETTs. This is one of the reasons why it is important to take a look at this group, since they play a central role in ensuring decent work. Despite its importance, this group is a blind spot in existing research, where studies on those responsible for the day-to-day implementation and operational organization of dual training in the workplace is infrequent and fragmentary (Bahl & Schneider, 2022; Baumgartner, 2015). The quantitative and qualitative survey we conducted revealed a considerable increase in the demands imposed on trainers in the course of transformation. A special aspect of this is the "sandwich" position of OVETTs, who face transformative, societal demands, and challenges from both below (i.e., from the apprentices) and above (i.e., from management). At the same time, there is a lack of structural and operational resources. Organizational changes expose them more directly to certain challenges, but do not give them a chance to help shape their own conditions.

Our study shows what happens when the roles identified in the middle position conflict (Harding et al., 2014), i.e., when the requirements for a "performance driver" conflict with those of the "umbrella protector" (Gjerde & Alvesson, 2020). This question of the subject position cannot be separated from the question of the company's social order (Kotthoff, 2005) and the position that the organizational VET trainers occupy there. In this context, the conditions of their own work and the associated scope of action are central. Consequently, our study can point out some aspects in which the activities of OVETTs are affected by stress, contradictory demands, and a lack of support. While some of the aspects cannot be actively influenced by the OVETTs, they continue to fulfil their tasks due to high intrinsic motivation, the high expectations the apprentices have of them, and the support of the colleagues in their team, who compensate for some of the tensions and help to minimize any reduction in the quality of training. Nevertheless, the training system at the company level is maintained to a large extent by the commitment of the training staff. In fact, this commitment has been shown to carry forward an institutional legacy (Carey et al., 2019), leading to institutional stability for an institution under transformational pressure. The present study thus aligns with previous literature emphasizing the role of specific groups and their position in the

maintenance or change of institutions (Muzio et al., 2013; Nicklich & Fortwengel, 2017). Above all, it shows that the role of OVETTs goes beyond the middle-manager "disseminator" position identified by Mintzberg (1973). Ultimately, decent work for OVETTs is increasingly jeopardized. Under these circumstances, the question that arises is whether spaces of 'decent work' can be maintained and extended by OVETTs as guarantors of decent work for others.

Our paper therefore contributes to the debates on the conditions of decent work in several respects. On the one hand – specific to the institutional context – we examine the pivotal position of OVETTs regarding the establishment of decent work. On the other hand, we show how the ambivalent role of a social group in an organization can influence the design of decent work. In particular, this ties in with the idea that "operational activity on the front line is strategic" (Vogus & Rerup, 2018, p. 227). Thus, from an empirical basis, the paper provides conceptual answers to the question of whether and how decent work can be sustained in and beyond transformative dynamics.

The study's narrow focus on the metal and electrical industry can be seen as a limitation. Future research must also examine the present findings in different contexts. However, the fact that the study was carried out during or shortly after the COVID pandemic must also be reflected upon and taken into account with a view to future transformations. Precisely because such changes are beyond the control of OVETTs, the way they are handled must continue to be discussed and examined. Anchoring new requirements in the modernized curricula or the entry requirements to work as an OVETT is one way to partially mitigate the pressure to transform. Appropriate resources must also be provided at the organizational level to ensure the development and implementation of new teaching methods and the creation of appropriate teaching and training materials. This however must be kept in mind. However, we have made it clear that in order to realize decent work under these conditions, the position of OVETTs must be taken seriously.

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Ethics Statement

We confirm that this manuscript has not been previously published. We have approved the content of this paper and have agreed to the IJRVT submission policies. To the best of our knowledge, the authors have no conflict of interest, financial or otherwise.

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Marco Blank is a research assistant and doctoral candidate at the Chair of Sociology with a focus on technology, work and society at Friedrich-Alexander-Universität Erlangen-Nürnberg since 2018. He is doing his doctorate on the topic of skilled work and is working on vocational training, further education and digitalization as well as mixed methods research. He previously trained as an IT specialist and later worked as a consultant in development aid for several years.

Sabine Pfeiffer, Dr, is professor for Sociology with the focus on technology, labor and society at Nuremberg Campus of Technology, Friedrich-Alexander Universität Erlangen-Nürnberg, Germany. She has been researching the relationship between Laboring Capacity and digital transformation since the 1990s. Her current research topics are Artificial Intelligence, cybersecurity, digital labor, work experience, and vocational training. Since 2020, she has taken on the role of spokesperson for the DFG Priority Programme 2267 "Digitalization of Working Worlds", with more than 30 research projects in 6 years.