

Fostering Vocational Identity Development in VET

A Treasure to be Raised

Christiane Thole, Georg Tafner

Abstract *This paper draws attention to a need for action revealed by empirical evidence indicating that vocational identity development is neglected in German vocational education and training (VET), despite the acknowledged significance of identity for vocational success and well-being. The authors argue that understanding and fostering the psychological processes underlying vocational identity development can enable VET schools and educators to improve connectivity between school and workplace, fulfill the normative objective of Bildung and tackle current challenges in the German VET system. The paper presents an (inter)action-based concept of identity development comprising a vocational ethos that guides daily action and an individualized vocational self-concept giving orientation for personal development. An exemplary case study illustrates the need for support and the pedagogical implications. To strengthen subject orientation in VET didactics the authors suggest a simple model using the categories meaning, responsibility, and productivity. Finally, the implications for VET practice are discussed.*

Title *Fostering Vocational Identity Development in VET: A Treasure to be Raised*

Keywords *Vocational Identity, Agency, Business and Economic Education, Reflexivity, Experiential Learning*

1 Introduction

For individuals, the world of work is replete with challenges: economic constraints, ecological troubles, digitalization, crises, globalization, career choices, precarity, and dynamic change (Beck, 1986; Giddens, 1991; Rosa, 2013; Stiglitz, 2002; Tafner, 2019). The hu-

Dr. Christiane Thole; Prof. Dr. Georg Tafner (University of Hamburg/Hamburg University of Technology; Humboldt University of Berlin);

christiane.thole@t-online.de; georg.tafner@hu-berlin.de;

<https://orcid.org/0009-0003-4008-4923>; <https://orcid.org/0009-0005-5123-5496>;

© Christiane Thole, Georg Tafner 2025, published by transcript Verlag.

This work is licensed under the Creative Commons Attribution 4.0 (BY) license.

man need for security and personal development encounters the market's demand for flexibility and efficiency. As well as threats and ambiguities, new opportunities in terms of jobs, markets, technologies, lifestyle etc. emerge (Giddens, 1991; Holzkamp, 1995). To find their place in society and pursue their goals, people have to shape the relationship between themselves and their environment, in order to find a balance between personal needs and society's demands. This activity is called *identity development* and people often find that a perfect fit is impossible to achieve (Biesta 2017, pp. 13–17; Erikson, 1966; Krappmann, 1969; Mead, 1934/1967).

In addition, the relevance of employees' subjectivity in the world of work increases. Unforeseeable disturbances, complex and ambiguous circumstances, disruptive incidents, risky but promising applications of new technologies, and agile work processes require spontaneous, creative idiosyncratic solutions based on professional expertise and experience (Thole, 2023b). Job profiles become more and more specialized, fluid, and variable, and allow employees to shape their workplace and work biographies according to their personal aspirations and preferences. Also, there is extensive evidence that *identification* with a job, company, or profession improves a person's performance, engagement, and motivation (Donovan, Brown & Mowen, 2004; Heskett, Jones, Loveman, Sasser & Schlesinger, 1994; Klotz, Billett & Winther, 2014; Nerdinger, 2011; Thole, 2021, pp. 104–109).

Simultaneously, German vocational education and training (VET) faces numerous challenges: the rigidity of formalized occupations, the need to adapt apprenticeship formats quickly to new labor market demands, the need to include refugees and migrants, the problem of exclusion of large numbers of young people who fail to thrive in the dual-track VET system, declining interest of potential applicants in the VET system, difficulties matching supply of and demand for apprenticeships, high rates of mental illness among young people, dropping out etc. (Bundesinstitut für Berufsbildung [BIBB], 2024). The bottom line is that there are discrepancies between individual learners' needs and the VET system's presuppositions. So far, no convincing solutions for these challenges have been found. Work-based learning is considered to be crucial to deal with these problems, but it requires accompanying concepts to unfold its potential. Connecting school and work-based learning is therefore an important challenge (European Centre for the Development of Vocational Training [Cedefop], 2021).

While *identity development* is crucial to surviving and thriving in society and the world of work, previous research indicates that German VET didactics often fail to meaningfully support this process (Beicht, Krewerth, Eberhard & Granato, 2009; Fischer & Hantke, 2019; Heinemann, Maurer & Rauner, 2009; Lewalter, Krapp & Wild, 2001; Thole, 2021; see section 3.2).

In this paper, we aim to show that fostering learners' vocational *identity development* is key to dealing with the discrepancies, conflicts, paradoxes, and ambiguities that arise in alternating learning environments (school and workplace). In order to support this claim, we seek to answer the following questions: What does it mean to foster *identity development*? Why is fostering *identity development* an urgent need in VET? What added value would this produce regarding learners' development, the requirements of the world of work, and the VET system?

In section 2.1 the paper starts by describing the features of subjects as they exist in the world (Biesta, 2017) because the subject is central to theories of *Bildung*.¹ Then it explains in section 2.2 why this human condition forces subjects to reflect on their identity. The term *identity* will be defined and underlying psychological processes will be explained in section 2.3. In section 2.4, relating *identity development* to the normative mandate of *Bildung* (as indicated in German VET curricula) will reveal substantial overlaps that show that vocational *identity development* is key to achieving an encompassing vocational action competence including the responsibility and capacity to participate in ongoing transformations. Vocational action competence is the willingness and capacity of the individual to behave in an adequately reflected, individually and socially responsible way in vocational, societal, and private situations. (Kultusministerkonferenz [KMK], 2021, pp. 14–16). The subsequent sections 3.1 and 3.2 will explain how a specific objective understanding of action orientation contributes to the neglect of vocational *identity development*. Then a case study in section 3.3 will illustrate the need for support and identify untapped potential which could be met and explored by fostering vocational *identity*. In section 4 the authors suggest a simple model using the categories meaning, responsibility, and productivity to strengthen the subject orientation in VET didactics. Finally, the authors will discuss in section 5 if and how fostering vocational *identity development* is feasible in VET schools.

2 The Human Condition of the Subject and *Identity Development*

In this section we lay out how the subject is both social and individual, material and immaterial, the starting point and end of *Bildung* (2.1). For the individual and social subject, *identity development* – finding a meaningful place in society – is a life-long activity (2.2). In section 2.3 we describe the psychological functions of *identity development*, before discussing in section 2.4 how *identity development* relates to Humboldt's ideas about *Bildung*.

2.1 The Subject as Beginning and End of *Bildung*

As Arnold writes (1997, p. 21), pedagogics focuses on the personal pedagogical orientation. Subject orientation, he argues, is the dominant substance of theory of *Bildung*, with *Bildung* representing the subject's entire interaction with the world. Humboldt (1792/2000, p. 58) believed that *Bildung* can succeed “only by the linking of the self to the world to achieve the most general, most animated, and most unrestrained interplay”. As in humanistic psychology, we are talking about the subject's relationship with the world (Fromm, 1941/2020b, p. 15), where the subject is part and parcel of culture, society, and the natural world, and expresses themselves in different dimensions. The subject is simultaneously an individual and a social being, as well as a mental and a material being (Klafki, 1996, p. 276; Nell-Breuning, 1985, pp. 39 and 153) (see table 1). As Frankl puts it: It

1 *Bildung* is the German concept of a broad education encompassing both knowledge and personal development.

is the mental aspect that underpins the wholeness and unity of the human being. That is what makes the wholeness physical, spiritual, and intellectual (2023, p. 18).

Table 1: Dimensions of the subject and their occurrence

	Individual being	Social being
Mental being	Consciousness	Language
Material being	Psychophysical	Provision

The *individual and mental* being has a consciousness that is only accessible to itself. Perception of the external world is always mediated, and the inner world – the consciousness – is accessible only to the subject itself. The individual is unique and indivisible – in Latin *in-dividuum* – because it cannot be subsumed into other orders: not the community, not the mass, not the class (Frankl, 2017, p. 330).

The *individual and material* being requires a physical body if it is to maintain and employ its consciousness. Without a body it cannot exist, act, or think. The body is dependent on the natural world. It requires air to breathe and nutrition for energy. Unlike the subject or person, the body is to some extent divisible and fusible. Indeed, fusion is the precondition for reproduction; without it the subject cannot reproduce (Frankl, 2017, p. 331). Material being encompasses the psychophysical, the entirety of psychological and physical. It has an instrumental purpose, but dignity is a property of the subject or person (Frankl, 2017, pp. 331–332). The subject requires means to maintain the body: food, shelter, and mobility are material necessities.

The *social and material* being recognizes the necessity of provision. They are unable to produce all they need themselves and must rely on others. Thus, subjects are both providers and provided for. Economic activity is a social phenomenon that serves to provide means to self and others. In other words both professionalism and economy are inherent to the subject. The process of choosing which means to procure and how to do so can be described as economy, which is thus part of the human condition (Tafner, 2024a).

The *social and mental* being is embedded in culture and society, and thus in work and economy. The thinking that occurs in the consciousness is autonomous but not isolated from the world. Instead, the subject participates in the world through communication, which is a social phenomenon. In fact, language is *the* social phenomenon that enables communication with others. People use language to communicate their ideas and influence the thoughts and actions of others. Thus, the subject's thoughts are not separate from the world; instead, the thoughts and ideas of others play a huge role in the origination of the subject's own ideas, which arise through the interplay of sensory perceptions on the one side and interpretation and evaluation of existing thoughts and ideas on the other (Tafner, 2024a). This is why subjects within a given culture and society share similarities: because they absorb, share, and internalize thoughts, ideas, and expectations. And so the subject also grows into their vocational training as part of a community of

practice in vocational training. As a social being the subject learns that there are also other subjects, and learns to act responsibly toward self, others, and the environment.

If we are to meet the demands of *Bildung* and understand why *identity* matters, it is essential to understand the human condition of existing as a subject in the world. Being subject has a twofold sense: grammatically the subject is an actor, and the term subject literally means to be controlled by something else. Both meanings are true, because as an *individual* and *social* being the subject relies on others' responsiveness to exist in the world (Biesta, 2017, pp. 9–16). This understanding of subjectivity is a core idea of interactionist understandings of *identity* (Mead, 1934/1967, see section 2.2 and 2.3). Reflecting on one's *identity* serves to shape the relationship between the individual and his/her environment. The aim is to satisfy the basic human needs for "competence, autonomy, and relatedness" (Ryan & Deci, 2000). The individual apprehends the world.

VET learners come into contact with the lifeworld economy and the science of economics at their workplace, at VET school, and in their private life. Economics as science – especially the neo-classical school – influences real-life economy and vice versa. Lifeworld economy and scientific economics come together as learners reflect their experience. The subject constructs reality not only (a posteriori) through empirical impressions and experience, but also (a priori) through internalized thoughts and theories (regardless of their objective quality).

Consciousness, which is accessible only to the subject (learner), represents the limit to scientific objectivity. Metaphorically speaking, theories in our brain are like glasses worn to see and understand the world. So it matters which kind of glasses you wear. In other words, the kind of theories the subjects encounter is important, as is the way they experience them. That is the context in which vocational *identity* forms (Tafner, 2024a). Given the different dimensions of the subject and the multiple ways of interacting with the world, the relationship between the subject and the world is complex and fluid. To become and remain part of the world, this relationship needs to be reflected and shaped thoughtfully. This activity is called *identity development*.

2.2 Definitions: Identification, *Identity*, and *Identity Development*

As Frey and Hausser (1987), Keupp et al. (2013), and Straub (2000) confirm, most *identity* theories agree that *identity development* ("identity work") consists in the *individual's reflection on their relationship with their environment*. This is a vital and lifelong activity that serves to find an adequate place in society (Erikson, 1966) and represents an *essential prerequisite for action* (Bandura, 1989; Krappmann, 1969; Simons, 2021). The complexity of the notion of *identity* requires an interdisciplinary approach (Erikson, 1966; Klotz et al., 2014; Straub, 2000). The psychoanalyst Erikson (1966) draws on fields such as social anthropology and comparative education, the sociologist Krappmann (1969) explicitly mentions Erikson's concept of *ego-identity* for identifying sociological dimensions of identity, and the sociologist Giddens (1991) explains the concept of a reflexive self-project in psychotherapeutic terms.

As VET aims for *vocational action competence* as the overall learning outcome, the authors choose an interactionist (Hausser, 1995; Mead, 1934/1967) and pragmatic approach (Dewey, 1938/1997). This means that *identity* is socially constructed and the interface be-

tween the individual and society represents the heart of *identity development*. This paper conceptualizes *identity* as a complex mental concept of a person's self, which is constructed by meta-reflection of sequential situational experiences and forms an integral part of action-regulating memory representations (Thole, 2021, p. 309). As such, it is a result of learning processes about the self and the world, and their interactions, and represents an important prerequisite, constituent, and outcome of *agency* (Bandura, 1989).

Vice versa, agency provides interaction between the individual and the world as the underlying context for *identity development* (Mead, 1934/1967). Agency represents the idea that people are neither completely autonomous nor simply determined by external factors, but act intentionally within a given framework. This enables them to exert partial influence on their environment and life course (Farau & Cohn, 1984, p. 359; Giddens, 1984/2017, p. 15). *Identity development* is the ongoing process of meta-reflection that continuously confirms or updates the current state of *identity* depending on the current experience of the subject.

*Identification*² is a statement about the *state* of certain facets of a person's *identity* (e.g. expertise, community of practice, socio-cultural origin, religion, values, interests). *Identification* describes the fit between a facet of a person's self-concept and a social entity serving as self-reference (for example group, organization, or vocation) (Heinrichs, Wuttke & Kögler, 2022; Klotz et al., 2014; Tajfel & Turner, 1986/2004), in other words the degree to which a person internalizes characteristic features of the social entity into their self-concept.

The self-concept is the individual's perception of self. It is formed through interaction with the person's environment and influences the way he/she acts (Shavelson, Hubner & Stanton, 1976). A vocational self-concept is a professional profile resulting from experience and self-reflection. It includes personal talents, aspirations, and strengths in relation to respective societal demands. In Germany, a standardized occupation as social *identity* will often be the starting point of a future more individualized vocational *identity* (Thole, 2021, pp. 317–318).

A person's *identity* consists of a *social identity* – deriving from *identification* with social entities such as a community of practice (Erikson, 1966; Tajfel & Turner, 1986/2004) – and a *personal identity* representing the individual's uniqueness and difference from others. Vocational *identity* is a decisive part of overall identity, because career has a major influence on income, status, and social milieu (Beck, 1986). Heinemann et al. (2009), Klotz et al. (2014) and Rauner, Frenzel, Piening & Bachmann (2016), found evidence of a close correlation between competence development and *identification* in the vocational domain. A research programme on learning motivation based on Ryan and Deci's theory of self-determination (2000) found evidence that learning processes that allow for experience of competence, autonomy, and social embedding promote interest, which is a prerequisite for *identification* (Lewalter et al., 2001; Prenzel, Kramer & Drechsel, 2001).

2 In some studies, the term *identity* is used as a synonym for *identification* (Heinemann et al., 2009; Klotz, Billet & Winther, 2014; Rauner et al., 2016). In this paper *identification* will be treated as a certain state of a person's *identity*.

2.3 The Psychological Functions of *Identity Development*

Overall, the reflection of social interactions serves several psychological functions of *identity development*:

1. To construct a continuous thread of meaning throughout the individual's biography (Erikson, 1966; Giddens, 1991; Hausser, 1995; Straub, 2000);
2. To generate a reflexive self-project that provides orientation for personal development (Giddens, 1991; Gini, 1998, p. 714; Mollenhauer, 1983, pp. 115–130);
3. To balance inner and outer reality (Cohn, 1975/2013; Erikson, 1966; Goffman, 1959; Krappmann 1969; Mead, 1934/1967);
4. To create coherence among diverse areas of life and aspects of *identity* (Erikson, 1966; Hausser, 1995; Keupp et al., 2013; Straub, 2000);
5. To define personal singularity (perceived difference) and/or *identification* with social groups (perceived similarity) (Erikson, 1966; Giddens, 1991; Goffman, 1959; Tajfel & Turner, 1986/2004).

Identity development has a diachronic (biographical) and a synchronic (situational) perspective. While functions 1 and 2 address the biographical vision and functions 3 and 4 the situational, function 5 is relevant to both. Figure 1 visualizes how these two perspectives are related. A *biographical* thread of meaning is constructed by sequential reflection of *situational* experience (Hausser, 1995; function 1). In a situation that requires action an individual will reflect and compare the present situation to others experienced earlier, in order to generate insights that help to solve the problem at hand. He/she will also project the resulting thread into the future to shape a meaningful goal that serves as intention for agency. Giddens (1991), Gini (1998), and Mollenhauer (1983) all argue that people not only want to find out who they are, but also what they want to be. They believe that people want to do something meaningful with their lives. By projecting a biographical thread of meaning into the future, individuals design a reflexive self-project that supplies orientation for developmental goals and represents a major source of motivation (function 2). For VET purposes this self-project involves the development of a *vocational self-concept* (see figure 1) that should include aspects of both social and personal identity.

Figure 1: Diachronic and synchronic perspectives of identity development



Note. From *Berufliche Identitätsarbeit als Bildungsauftrag der Berufsschule – am Beispiel der dualen Ausbildung im Einzelhandel* (p. 285), by C. Thole, 2021, wbv. Copyright 2021 by Christiane Thole. Reprinted with permission.

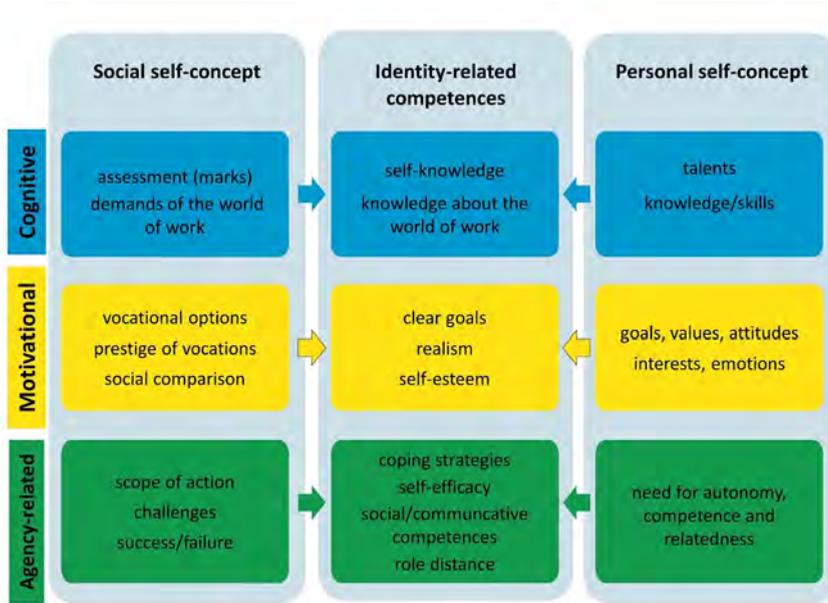
Kolb (1984) describes the process of meta-situational reflection as an experiential learning cycle with four iterative stages: *concrete experience*, *reflective observation*, *abstract conceptualization*, and *active experimentation* (the central element in figure 1). In fact this is nothing other than experiential learning, which is already well-established in German VET. We learn by doing, provided that we comprehend and reflect on what we do (Dewey, 1938/1997). Agency exhibits the same structure as the experiential learning cycle (Bandura, 1989).

Identity development relates to the aspects of learning processes that are directed toward the *self* rather than the objective task. Learning about the self in the world takes place in all interactions and learning processes in VET even if they are not explicitly fostered. Self-reflection usually occurs during the action and is often unconscious; explicit reflection sometimes follows (Schön, 1983). Reflection has a decisive impact on the outcome of an action (Bandura, 1989; Simons, 2021). If the situation is considered to be significant for the self, the individual will decide whether to internalize or resist received feedback (Mead, 1934/1967, p. 168).

Figure 2 visualizes what happens internally when the subject is required to act in a certain situation. When disparities between personal aspirations and social demands arise, it becomes necessary to balance inner and outer reality (function 3). In the world of work, this applies especially during transitions in work biographies (Busshoff, 2001) and conflicts in the workplace (Goffman, 1959; Krappmann, 1969). Symbolic interactionism (Mead/1967, 1934) posits that where discrepancies arise between societal demands and personal needs, individuals have to mediate between a social self-concept and an inner personal self-concept. The social self-concept seeks to satisfy and internalize societal demands (left-hand column), the personal self-concept comprises the person's interests, values, and aspirations (right-hand column). In addition, the demands arising in differ-

ent areas of life – such as family, work, peer group, religious community, etc. – may be contradictory (Bronfenbrenner, 1979; Keupp et al., 2013). Consequently, the subject also has to establish coherence among diverging societal expectations (function 4).

Figure 2: Balance of social and personal self-concept



Note. From *Berufliche Identitätsarbeit als Bildungsauftrag der Berufsschule – am Beispiel der dualen Ausbildung im Einzelhandel* (p. 282), by C. Thole, 2021, wbv. Copyright 2021 by Christiane Thole. Reprinted with permission.

To achieve personal fulfilment, individuals strive to reconcile both parts of the self-concept (Keupp et al., 2013; Straub, 2000). It is important to note that self-reflection is not only cognitive, but motivational aspects and agency-related competences also play a major role (Bandura, 1989; Hausser, 1995; Kaak, Kracke, Driesel-Lange & Hany, 2013). The middle column shows competences that are required to reconcile social and personal self-concept (Busshoff, 2001; Kaak et al., 2013; Savickas & Hartung, 1996; Super, 1990). The cognitive dimension comprises knowledge about the self and the world of work; the motivational dimension involves goal-setting, realism, and self-esteem; agency-related competences comprise coping strategies and self-efficacy beliefs (Bandura, 1989; Hausser, 1995). Because this process takes place in social interaction, the individual also needs a set of social and communicative competences – one of which is role distance (Goffman, 1959; Krappmann, 1969) – to remain true to themselves while gaining the counterpart’s acceptance.

When a young person starts an apprenticeship, roles and other aspects of life change. Initially, there is a large discrepancy between the demands of the world of work (social self-concept) and the learner's abilities and dispositions (personal self-concept) (Duemmler, Caprani & Felder, 2017; Kutscha, Besener & Debie, 2009; Lange, 2019; Thole, 2021). Helping learners to reconfigure their social and personal self-concept by developing the *identity*-related competences is a major goal for VET courses and teachers. This needs to be done not only at the cognitive level, but also at the motivational and agency-related levels. It is important to note that this does not necessarily require the learners to adapt unilaterally to demands. They may also find idiosyncratic ways of coping or to persuade others to be responsive to their aspirations, needs, or wishes (Giddens 1984/2017, p.15; Goffman, 1959; Holzkamp, 1995; Krappmann, 1969).

German VET curricula explicitly state that *vocational action competence* implies the capacity to participate in the transformation of the world of work and society. As this should be done with a sense of social, individual, ecological, and economic responsibility (KMK, 2021), VET learners need not only a *vocational self-concept* but also a *vocational ethos* (cf. figure 1) in the sense of a bundle of norms, rules, and guiding moral principles that are in line with their *identity*, facilitate decision-making, and ensure authentic, responsible agency in daily life. Standardized social identities like occupations and roles give orientation, but in a complex, challenging, and subjectivized world of work more individualized solutions may be required to achieve consistency and coherence by tapping individual potentials (function 5).

Role distance is one way to live a unique self in a standardized role, by playing it in a specific way that best fits the self-concept of the subject (Goffman, 1959; Moreno, 1961; Petzold & Mathias, 1982). Roles are a bundle of attitudes, values, patterns of activity, and behavioral norms connected with a certain position in society (Linton, 1936). We are all holders of multiple roles – as learners, teachers, friends, parents, children, neighbours, colleagues, superiors – that can conflict with each other or with the personal self-concept. The more consistent these roles are and the closer they are to the subject's aspirations, the more authentic, happy, healthy, and successful the subject will be (Donovan et al., 2004; Heskett et al., 1994; Klotz et al., 2014; Nerding, 2011; Thole, 2021, pp. 104–109).

Although roles are standardized, subjects play them in individual ways and as such create scope for shaping their self-concept. The overall aim is to act in an authentic way, because *identification* with a role is a prerequisite for performing it well (Giddens, 1991, p. 78). The diversity deriving from role distance also enriches the world of work, as it has the potential to produce a multitude of problem-solving strategies (Goffman, 1959; Handayani, Suharnomo, Yuniawan, Wahyudi & Wikaningrum, 2017).

Apprenticeship is a setting where young people have the opportunity to explore different interpretations of their role. They receive the opportunity to experiment with their feelings and the feedback they receive for different behaviors, which is a prerequisite for shaping a vocational self-concept and ethos.

Although these theoretical approaches seem useful for understanding the relevance of *identity development* to agency and *vocational action competence*, the term *identity* is not mentioned once in the guidelines for preparing VET curricula issued by the Conference of Ministers of Culture (KMK, 2021). Instead, the term *Kompetenz* (competence) predominates (96 mentions). This does not exclude using *identity* theories to interpret action

orientation. Indeed, this section has shown that *identity development* requires exactly the competences described by the Conference of Ministers of Culture (KMK, 2021): professional, self-, social, methodological, learning, and communicative competences, as well as personal and structural reflection and lifelong learning.

In this context, it is important to note that the connotation of the German term *Kompetenz* deviates from the use of the term *competence* in English. While the latter refers to the *proven* ability to perform *certain* tasks the German term *Kompetenz* describes a person's *assumed* capacity to cope with a *wide range of unknown* tasks (Sloane & Dilger, 2005). So the German term represents an intrinsic characteristic of the subject and is therefore part of his/her identity, while the English term indicates an objective requirement linked to a task. The following section demonstrates how *identity development* is associated with the notion of *Bildung* in German VET curricula (KMK, 2021).

2.4 The Normative Goal of *Bildung* as the Essence of *Identity Development*

The term *Bildung* can be traced back to Wilhelm von Humboldt (1767–1835), who outlines the concept in his *Theory of Bildung* (1792/2000). It was influential in universities and humanistic grammar schools. In the past scholars debated whether *Bildung* had a place in VET – which primarily aims to qualify learners for the work of world (Blankertz, 1963; Kutscha, 2011). Today there is a broad consensus that work and vocation are an important source of subjective meaning (Beck & Brater, 1977; Klotz et al., 2014; Kutscha, 2015; Meyer, 2014). It is also widely accepted that action competence, autonomy, and solidarity should be educational goals of equal importance (KMK, 2021). However, the question of how this can be achieved under contemporary societal, and economic conditions remains unresolved and marginal to VET research. We suggest that analyzing Humboldt's text will supply productive pointers.

Humboldt (1792/2000, p. 62) argues that *Bildung* implies “*deep reflection and unceasing observation*” and that this gives man a “*fresh view of the world and through this its own, fresh self-determination*” (p. 60). So, like *identity development*, *Bildung* involves reflecting on the relationship between the individual and his/her environment to build a self-concept (Humboldt, 1792/2000, p. 58). Humboldt's statements can be matched to the five psychological functions of *identity development* (see section 2.3):

First of all, Humboldt (1792/2000, p. 58) states that “man” strives for *meaning*: this is the ultimate purpose of existence. Concerning the world of work, Humboldt asserts that people no longer want “*only to prepare knowledge and tools for men's use*” (p. 60). Today, Gini (1998) argues that we are identified by the work we do, and that we have to choose our vocation consciously. Depending on his/her interests, motives, values, or sense of responsibility, the individual decides what he/she wants to be in the world and thus contributes to shaping the world around them (Giddens 1984/2017, p. 15; Hausser, 1995, pp. 49–53). By narrating a life story by means of retrospective reflection, individuals construct a unique central thread that reduces complexity and organizes the individual's perception of the world in a coherent way (Petzold & Matthias, 1982; Straub, 2000).

Second, Humboldt (1792/2000) asserts that “man” strives “*for greater signification*”, “*inner improvement and elevation*” towards an “*ultimate goal*” (pp. 58–60). This idea of a reflexive life project is also found in contemporary *identity* theories: Mollenhauer (1983, pp.

115–130) emphasizes that *identity* – understood as a treatment of complexity and diversity that makes sense to the individual – is a fragile, fictitious draft of the self that is never actually achievable, because a perfect *identity* does not exist. However, this idea of self does drive the process of *Bildung*. Giddens (1991) describes modernity as the industrialized, globalized capitalist world characterized by a reflexivity based on a methodological principle of doubt that undermines the certainty of knowledge typical of Enlightenment thought. Consequently, the fate of individuals is no longer predetermined by tradition and instead requires clarification and active reflection by the subject. Although the influence of tradition on the individual was still predominant during Humboldt's time, his concept resembles Giddens' modern concept of the reflexive self.

Third, Humboldt (1792/2000, p. 59) also addresses the issue of balance of inner and outer reality and answers it rather optimistically, calling on the individual to assume responsibility. He argues that “man” must “*bring the mass of objects closer*” and increase the resemblance between the world and the individual. In our time, the critical psychologist Holzkamp (1995, p. 190) stresses that the possibility to expand competence and quality of life can be a major motivation of learning. Giddens (1984/2017, p. 15) notes that agency always involves some form of power to change the world. Our ideas depend on our sensing as well as our intellect. So, changes within our mind also change our view of the external world. Experience itself requires comprehension. In other words, thinking influences perception, including the perception of the scope for action (transcendental idealism). This is especially the case in a society of transformation which depends on creativity and innovation.

Fourth, according to Humboldt (1792/2000, pp. 58–60), *Bildung* also seeks to create coherence in a person's life: “man” aims to transform scattered knowledge into a closed system. Contemporary psychologists Keupp et al. (2013) and Straub (2000) confirm that – even though our society offers a growing multitude of options and lifestyles with new gender constellations, cultural influences, and (discontinuous) career paths – there is still a basic psychological need for coherence of areas of life that offer orientation and relief from complexity.

Finally, Humboldt (1792/2000) considers individuality to be an important resource for society. He appreciates “*the difference between minds*” and “*the variety of ways in which the world is reflected in different individuals*” (p. 62). Humboldt's observation that people carry out the same tasks in different ways was extensively explored by Goffman (1959), who investigated how individuals maintain their individuality and authenticity by interpreting their roles in different ways. This is known as *role distance* (Moreno, 1961; Petzold & Mathias, 1982).

In light of Humboldt's understanding of *Bildung*, fostering *identity development* can be considered an official mandate of German VET schools, even if this is not explicitly stated. However, VET teachers are probably not aware of this. Without clarification, the term *Bildung* remains vague. Conceiving *Bildung* as *identity development* may help to substantiate the idea in a contemporary way (Thole 2021, p. 177). However, common concepts of action-orientated didactics may impede this. The following section will explain why this is the case.

3 A Neglect of Vocational *Identity Development* in German VET

Section 3.1 opens with a discussion of two approaches to integrating action orientation in VET: objective and subjective understanding. In section 3.2 we show that an objective understanding – as predominates in VET in Germany – neglects vocational *identity development*. The case study described in section 3.3 shows the kind of *identity* conflicts that can arise and require support.

3.1 Objective and Subjective Understandings of Action Orientation

Ever since the introduction of action-orientated didactics in German VET in the 1990s, there have been concerns that subjective aspects had been disregarded (Backes-Haase & Klinkisch, 2015; Dörig, 2003, pp. 354–377; Zabeck, 2004). The status quo reported above demonstrates these worries to be justified. This section explains why action orientation can lead to a neglect of subjectivity – but must not automatically do so.

Action orientation as a didactic principle can be interpreted in different ways (Dörig, 2003; Thole, 2021, pp. 222–224). In German VET, two groups of theories were influential: action regulation theories (Hacker, 1994; Miller et al., 1960; Volpert, 1980) and cognitive learning theories (Aebli, 2006; Piaget, 1970).

Action regulation theories were developed by psychologists and labour researchers who analyzed work processes in industry from the 1960s to the 1980s. The aim was to optimize and humanize work processes by analyzing how actors plan actions to achieve predefined goals. One core idea is an iterative action cycle incurring feedback. Experiencing an action influences the actor's mental prerequisites; for example, she/he will learn to avoid certain mistakes and to optimize the work process.

Cognitive and experiential learning theories (Aebli, 2006; Piaget, 1970) analyze the psychological processes generated by the interactions between learners and their environment. Aebli (2006) describes the psychological processes involved in action and learning cycles, while Piaget (1970) explains how individuals align inner and outer reality by means of mechanisms such as assimilation and accommodation. Dewey's experiential learning approach (1938/1997) is a well-known example that strives to expand learners' participation, motivation, and self-determination.

Both these strands of theory are useful for overcoming the dualism of thinking and action (Tramm, 1994), which is a primary objective of action-orientated didactics. However, it is important to note that action regulation theories tend to neglect subjective aspects such as individuality, role distance, social interaction, and actors' biographies, desires, and emotions – even though these factors are highly relevant under contemporary conditions in a tertiarized world of work (Beck, 1986; Giddens, 1991; Hacker, 2009; Thole, 2021, pp. 222–227). Action regulation theories are therefore inappropriate when it comes to producing transformative changes, tapping individuals' potential, or resolving inner conflicts. Cognitive learning theories could be useful but have rarely been applied to support *identity development* in VET (Holzkamp, 1995).

Because identity-related reflection is closely linked to agency (Bandura, 1989; Simons, 2021), one justification for action orientation could lie in *identity* theories. However, in German VET in general, action orientation tends to be based on action

regulation theory and German VET curricula currently focus on objective model work processes (KMK, 2021; Thole 2021, pp. 190–203). This leads to a neglect of subjective aspects.

Another important barrier is that there is as yet no common understanding of the concept of *identity development*. Scholars focus on different aspects depending on their discipline. While sociologists analyze the interface between the individual and his/her social environment (Goffman, 1959; Krappmann, 1969; Mead/1967, 1934), psychologists and psychoanalysts examine the mental processes involved (Erikson 1966; Keupp et al, 2013).

The existence of a multitude of theories does not necessarily indicate confusion or unclarity, but rather different perspectives, aspects and priorities (Frey & Hausser, 1987; Keupp et al., 2013; Straub, 2000). It is important to note that in VET practice, one cannot dice *identity* analytically as science does; rather, all aspects of *identity* are simultaneously and indissolubly interconnected and present. In other words, VET stakeholders who want to foster *identity development* must necessarily deal with complexity.

3.2 Objective Understanding Leads to a Neglect of Vocational Identity Development

While *identification* with a vocation is desirable due to the aforementioned positive effects, there are many signs of a need for action in VET: high drop-out and turnover rates, a shortage of applicants, evidence of poor-quality training, drug consumption and mental illness, and generalized malaise among young people (Beicht et al., 2009; BIBB, 2024; Hanewinkel, Hansen & Neumann, 2024; Kaman & Ravens-Sieberer, 2024; Moor, Weber & Richter, 2024; Uhly & Neises, 2023).

Furthermore, there is consistent empirical evidence that vocational *identity development* is neglected in VET. A study on the quality of VET training by the German Federal Institute of Vocational Training (Bundesinstitut für Berufsbildung) (Beicht et al., 2009) found that apprentices frequently experience conflicts around *identity* and tend to seek support from family and friends, but rarely approach their VET teachers in this context (Krewerth, 2010).

Empirical studies in the retail sector show that *competence* development – on which VET didactics focus – is only one of four relevant developmental tasks (Havighurst, 1974). The other three – *identification* (with a job or profession), *recognition* (in the workplace), and *shaping* (the workplace and biography) – are crucial for apprentices, but hardly addressed in VET didactics (Duemmler et al., 2017; Kutscha et al., 2009; Thole, 2020, 2021). Corresponding developmental tasks have also been reported in other VET contexts by Casper-Kroll (2011), Gruschka (1985) and Hericks (2006).

As further studies show, retail is not the only sector where problems concerning *identification* exist. Heinemann et al. (2009) found that many other occupations face even greater *identification* problems than the retail sector. Additionally, several studies have found *identification* in fact declining during the course of training (Heinzer & Reichenbach, 2013; Lewalter et al., 2001; Rauner et al., 2016).

Researchers have criticized the persistent predominance of externally directed forms of learning in VET schools (Prenzel et al., 2001). The overall impression is that apprentices have to solve their *identity* conflicts on their own (Duemmler et al., 2017; Kutscha

et al., 2009; Thole, 2020, 2021). VET pays little attention to the questions of enhancing learners' *identification* with their vocation, supporting the process of gaining recognition, or shaping their workplace and work biography. This is the case even where the school's own curriculum explicitly addresses vocational *identity development* (Tramm et al., 2009; Thole, 2021).

The empirical evidence indicates that the current action-orientated didactic approach in German VET is inadequate, even though curricula stipulate a mandate of *Bildung* for VET schools in the sense that *vocational action competence* should also include the ability to participate in shaping society and the world of work with a sense of social, economic, ecological, and individual responsibility (KMK, 2021, pp. 14–16). Handling work and business processes from an interdisciplinary perspective that takes account of their full complexity can promote practical application and help to avoid the accumulation of inert knowledge (Gramlinger & Tramm, 2003; Tramm, Kremer, & Tenberg, 2011).

However, the Standing Conference of the Ministers of Education and Cultural Affairs of the Länder in the Federal Republic of Germany (KMK, 2021)³ did not spell out the possible implications of the mandate of *Bildung* for the respective learning situations (Fischer & Hantke, 2019; Thole, 2021, pp. 189–193). Therefore, it is within the competence and responsibility of the teachers to implement education concretely according to the mandate (Tramm et al., 2009).

It is also noteworthy that the German labour market and VET system are based on formal occupations.⁴ These constitute standardized bundles of qualifications and skills that are recognized by all relevant stakeholders as the basis for employability and job mobility. Because learning situations in German VET curricula align with typical work and business processes representing an occupation, they are suitable to foster *social identity* (Beck & Brater, 1977; Heinrichs et al. 2022; Klotz et al., 2014).

However, occupations in the formalized sense are standardized and rigid while job profiles and biographies tend to be individualized, discontinuous, and fluid (Baethge, 2020; Voss, 2001; Bretschneider & Schwarz, 2015). As a result, occupations do not reflect the variety of workplaces and holders of vocational roles – not to mention individual characteristics. The established didactic approach therefore fails to provide concepts to foster an *individualized* vocational self-concept on top of the occupational social identity. The latter is more self-evident in the Anglo-Saxon world, where occupations tend to be less standardized (Billett & Somerville, 2004; Gini, 1998; Kirpal, Brown & Dif, 2007; Savickas, 2012). It is also supported by well-established career choice theories (Holland, 1985; Savickas, 2012; Super, 1990).

Another important aspect is that the core disciplines of VET – pedagogy and business economics – do not take vocational *identity development* sufficiently into account. Given

3 In Germany, education is the responsibility of the Federal States. The Standing Conference of the Ministers of Education and Cultural Affairs of the Federal States coordinates education policy at the national level.

4 In this paper the term *occupation* is used to describe formal (often codified) professions, while the term *vocation* refers to a professional self-concept as an important part of a person's *identity* (Klotz et al., 2014).

that the world of work is part of the economy, business and economics are highly relevant disciplines. However, the neo-classical school with its famous model of economic self-interest and perfect information excludes many aspects of real life (Friedrich, 2015; Etzioni 1988; Graupe, 2012, 2014; Ötsch & Kapeller, Tafner, 2019; Tafner & Casper, 2022; 2010; Ulrich 2001). If we are to deal with learners' real-life problems, it is therefore crucial to apply an interdisciplinary approach including business ethics, ecology, politics, sociology, and psychology. Although this is the explicit intention of the German didactic approach, the predominance of neo-classical thinking in schools and in introductory courses at universities may stand in its way.

Furthermore, certain educationalists view the very concept of *identity* with skepticism. One reason for this is that researchers usually strive for objectivity and intersubjectivity while *identity* deals with subjectivity. In addition, its abstract character and complexity make it hard to operationalize *identity* for empirical research (Keupp et al., 2013; Krappmann, 1969, pp.199–206; Straus & Höfer, 1997; Thole, 2023a). In certain circles the concept is rejected as fictional and ideological (Helsper, 1991; Hoffmann & Neuner, 1997; Keupp et al., 2013; Lenzen, 1991; Mollenhauer, 1983; Straub, 2000).

German VET curricula do acknowledge that VET must integrate three perspectives: relevant situations, the learners' point of view, and scholarship (Reetz, 1984; Tafner, 2020). Unintentionally and unconsciously, however, the subject is often lost in an objectivized action-orientated approach. The following section illustrates these gaps by means of a case study and reveals the need for support for *identity development*.

3.3 Case Study: Hendrik's Need for Support

In this sub-section we turn to the case study of an apprentice, who we refer to as Hendrik. In sub-section 3.3.1 we describe our methodology and outline the theory of developmental tasks. In sub-section 3.3.2 we explore the *identity* problems Hendrik experienced in association with his developmental tasks. Potential pedagogical interventions are discussed in sub-section 3.3.3, and in sub-section 3.3.4 we describe how this can contribute to improving quality in vocational education.

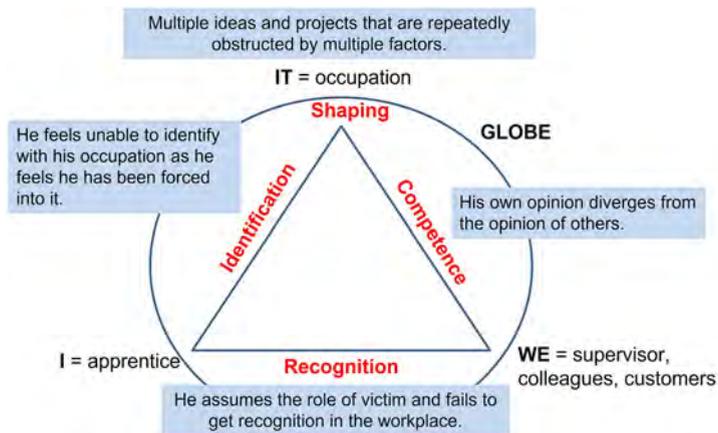
3.3.1 Methodology and Developmental Tasks in VET

Hendrik's case was chosen because it provides insights into multiple problems associated with *identity*. Hendrik has few social resources, but he is not mentally ill. As a consequence, his need for support is strong, but will not be satisfied by the health system (or any other institution). Hendrik was one of fourteen participants in the first author's empirical research in the retail sector (Thole, 2020, 2021). As the aim of the study was also theory building, longitudinal qualitative case studies were carried out according to Eisenhardt's recommendations (1989; for detailed methodology see Thole, 2023a). The cross-case analysis and a literature review identified the four developmental tasks (Havighurst, 1974) mentioned in chapter 3.2: *competence* development for the respective field, *recognition* by stakeholders in the workplace, *identification* with the occupation, and the *shaping* of the workplace and work biography (for more details see Thole, 2020, 2023a). It was noticeable that most apprentices identified only weakly with their occupation and suffered from a lack of recognition in the workplace. In addition, they showed a tendency

to cope with challenges in defensive or avoidant ways instead of choosing problem-solving approaches with the potential to enlarge their scope for self-actualization and recognition of their needs (Fuller & Unwin, 2003; Holzkamp, 1995; Thole, 2018; Thole, 2021, pp. 443–481). VET should therefore encourage apprentices to identify and explore their existing scope of action.

For within-case analysis the researcher applied a theme-centered process analysis according to Lotz (2012). This is based on Cohn's theme-centered interaction (TCI) (1975/2013), which is a pedagogical concept based on humanistic values that seeks to promote a balance between the individual learner (I), the learning group (WE) and the theme (IT), taking into account external restrictions and influences (GLOBE). As such it is suitable for dealing with discrepancies between the individual and his/her environment, such as *identity* problems. The four-factor model is visualized by a triangle within a circle and can also serve to analyze an individual's situation in his/her world (cf. Hendrik's example in fig. 3).

Figure 3: Hendrik's developmental tasks



Note. From *Berufliche Identitätsarbeit als Bildungsauftrag der Berufsschule – am Beispiel der dualen Ausbildung im Einzelhandel* (p. 92), by C. Thole, 2021, wbv. Copyright 2021 by Christiane Thole. Amended and reprinted with permission.

In theme-centered process analysis the sides of the triangle are labeled – in this case with the above-mentioned developmental tasks. These within-case analyses revealed that – despite common developmental tasks – the constellations of challenges and the individual problem-solving approaches were very specific (Thole 2021, 2020, 2023a). This means that VET teachers face the challenge of analyzing learners' *identity* problems on a case-by-case basis. Hendrik's case shows how this can be done.

3.3.2 Hendrik's Developmental Tasks

In the following we investigate the extent to which Hendrik is able to accomplish his development tasks. The problems involved are illustrated in figure 3.

3.3.2.1 A Lack of *Identification* with the Retail Business

Due to a series of strokes of fate Hendrik was unable to pursue his goal of becoming a teacher. Instead, he was obliged to start an apprenticeship at a supermarket in a socially deprived neighborhood, as there was no alternative. That is why he has difficulty identifying with his occupation, as quotes A and B show. However, he does enjoy certain aspects of his job (cf. quote C).

Quote A: Ordinary family. Parents severely ill. Brother died. Taken seriously sick myself. Left school. I was good enough to have stayed at school in fact. (...) (Thole, 2021, p. 463, all quotes translated from German)

Quote B: I never wanted to work there. [...] (Thole, 2021, p. 463) It [retail] was not my dream job. (...) Actually, I wanted to study to become a teacher. (...) (Thole, 2021, Hendrik Ia, 64–76)

Quote C: (...) In fact, it's a great vocation. (...) Sometimes I enjoy my job when I get a feeling of success because I am becoming faster. (Thole, 2021, p. 462)

3.3.2.2 A Lack of Recognition at the Workplace

Hendrik also has little positive to say about his customers (quote D), peers at VET school (quote E, G), and superiors (quote G). In return, he feels excluded as he has difficulty finding a job and is refused a third year of apprenticeship without plausible reasons.

Quote D: [Researcher: What would you say if you were asked what your job is?] Hanging around with ape-men. Customers are horrible. (...) (Thole, 2021, p. 462)

Quote E: Then I had to attend a VET preparation course together with a bunch of idiots. (...) (Thole, 2021, p. 463)

Quote F: Nobody wanted me. (...) Applying for a job is difficult. Nobody will hire me. (Thole, 2021, p. 463)

Quote G: I could talk about others who were accepted for a third year, who sleep during the lessons. I lose my temper. (...) They say that I am not ready for it [a third year]. I really think they must be complete idiots. (Thole, 2021, Hendrik II, 26–28)

3.3.2.3 Contradictory Assessments of Competence

One possible reason for the experienced rejection may be the discrepancy between his own assessment of his competence and what others think (quote H, I). His self-assessment was often more positive than the external feedback he received, while he also oscillated between feeling inferior and superior. On the one hand, he feels overwhelmed (quote J), on the other hand he feels more qualified than the others (quote I). It is difficult to judge whether Hendrik's self-assessment was justified or exaggerated. At any rate, his externalizing style of attributing failure to others may have provoked rejection and at the same time prevented him from understanding his own contribution to the outcome.

Quote H: My shift leader and managers from other stores come and say: Oh my god, why did you not get it? (...) The others who get the third year are not better than me. [Researcher: What could make the difference?] My boss. (Thole, 2021, Hendrik II, 26–28)

Quote I: I don't know, if I am the only one who knows how to alter the prices in the back office, then she [manager] can't tell me that I'm not qualified for my job. (...) And then I go to my boss and ask her something and she doesn't know. (Thole, 2021, Hendrik II, 56, 62)

Quote J: When they [the manager and colleagues] say to me: You do it once with assistance and then you have to be able to do it on your own. Then I am perplexed and think: How am I going to manage to do this on my own? (Thole, 2021, Hendrik Ib, 52)

3.3.2.4 Feeling Other-directed

Hendrik's repeated experience of setbacks and failure leaves him feeling other-directed. He tends to blame others for his situation (cf. quote K, L). He has ideas and options for his career, but no idea how to realize them. He can even imagine remaining in the retail business (quote M).

Quote K: Thanks to the education authority's rules about the eleventh grade I have wound up at [supermarket]. (Thole, 2021, p. 463)

Quote L: After six months on social benefits they [the job center] said that I have to do an apprenticeship or lose benefits. And if I don't I'll get taken to court. (Thole, 2021, Hendrik Ia, 52)

Quote M (second interview): I would like to do something with real estate. You can do it if you have the capital. (...) Then I would be independent. (...) Because I like cars and have already owned many, I am thinking about changing track [toward the automobile trade]. (...) [Researcher: Could you imagine settling for the retail business?] Definitely if I had my own place, my own business. It is really fun, what we learn at school. (Thole, 2021, Hendrik II, 86–124)

3.3.3 Pedagogical Implications Regarding Hendrik's *Identity Development*

The analysis suggests that Hendrik may also have contributed to his troubles through his interactions with others, but he does not seem to be aware of this. His tendency to feel victimized and blame others prevents him from building a consistent self-concept and sustainable relationships with others. The silver lining is that a change in subjective assessment or attitude could have substantially improved Hendrik's situation even if his environment did not change at all. This is what Hendrik required support for. Hendrik's narrative suggests a string of issues that explain his situation and subjectivity much better than competence: social problems (illness, lack of recognition, lack of independence), legal problems (being forced to continue in education, penalties, juvenile court), lifeworld economic problems (rejected applications, unpleasant customers, problems with man-

ager, time pressure, simultaneously overstretched and bored), and ethical problems (disrespecting others).

With respect to the five functions of *identity development* (see 2.3), Hendrik required the following support:

1. To support him in constructing a continuous thread of meaning it is necessary to enhance his ability to build a *positive* self-concept. Otherwise, his *identification* with the victim role risked becoming a self-fulfilling prophecy and preventing him from taking charge of his life. As Hendrik's personal self-concept was contradictory it would have been crucial to identify and correct dysfunctional elements. Small successes can improve confidence for future tasks. As Dewey (1938/1997) points out, there are harmful and productive experiences, and it is the teacher's task to make sure learners have the latter. Even a setback can be productive for *identity development* if it is reflected upon and conclusions for future agency are drawn.
2. To generate a reflexive self-project that provides orientation for personal development he needs support in focusing and prioritizing his personal objectives. Hendrik's case shows that choosing a job is *not* the same as taking charge of one's life. That is why it is important for the vocational orientation that starts in secondary school to be continued during VET (Meyer, 2014). The vocation needs to be consistent with other elements of the self-concept. Additionally, in times of uncertainty it makes sense to keep flexible alternatives open. The reflexive project cannot simply replicate the models of the past: it needs to be both stable and flexible. Choosing pathways that permit a change of direction if necessary is a plausible strategy for remaining flexible. The vision does *not* need to be realistic in the short run. As long as it aligns with the individual's talents, values, needs, and motives, the project will produce the motivation needed to set and pursue developmental goals (Mollenhauer, 1983, pp. 115–130). Striving for an authentic and coherent vocational *identity* is key, rather than unconsciously internalizing external demands that interfere with the personal self-concept (cf. organized self-realization by Honneth, 2002).
3. In order to learn to balance inner and outer reality, Hendrik would have required regular reflected feedback from others. In this respect, it would have been helpful to encourage self-criticism by consistently asking him what impact his behaviour had on others. This would have permitted him to find an empathetic form of self-presentation (Krappmann, 1969) that allowed others to save face. In this context, criticism becomes a valuable learning opportunity. To support Hendrik's positive self-image it would also have been desirable to create settings that allowed him to receive positive feedback and gain a realistic assessment of his strengths.
4. To create coherence among the different areas of life and aspects of *identity*, Hendrik would have required mentoring to offer positive alternative interpretations. He does manage to give the different areas of his life a coherent meaning – but a negative one. He is convinced he is unlucky and that others treat him unfairly. Seeing himself as a person who does not give up and is able to cope with challenges could create a positive thread of meaning (function 1). This would also allow him to discover that he has a realistic chance of becoming a VET teacher, which is very close to his original vocational goal.

5. To define personal singularity and/or identification with social groups, Hendrik would have to be encouraged to identify the strengths that characterize him as an individual and integrate him socially. For this purpose, he should be encouraged to experiment with other interpretations of his role – for instance interpreting his work in a discount supermarket as providing affordable goods to needy people and/or (in light of his ambition to become a teacher) teaching his commercial expertise to less experienced colleagues. Others would probably have responded more positively to him if he had tried to show a positive attitude, and he would also have developed useful skills for his future vocation – whether as a teacher or in any other profession.

3.3.4 The Potential Added Value of Vocational *Identity Support*

The case analysis shows that solving *identity* problems is key to success in the world of work and for personal well-being (cf. empirical evidence quoted in the introduction). Thus, support for *identity development* could boost Hendrik's personal development, but could also contribute to tackling a number of problems in the VET system and the world of work. It could prevent Hendrik from becoming mentally ill, thus reducing absenteeism. Hendrik might be more motivated – despite feeling forced to make compromises – and offer better customer service and performance at work. He could also become more confident and capable of coping with challenges, ambiguities, and contradictions in the workplace, and more flexible and creative. Being aware that he can shape his own vocational self-concept might enable him to respond quickly to new requirements, whereas it takes a long time to alter the VET system. It might even contribute to reducing the shortage of teachers by helping Hendrik to pursue that vocational goal. Altogether, fostering *identity development* could contribute to VET courses acquiring a better public image and help to include more young people in the VET system. These potential positive outcomes of fostering *identity development* in VET suggest that it is worth the effort. However, this begs the question if and how this can be implemented. The first step will be to draw VET teachers' attention to the subject's point of view. To support this process the authors suggest a simple didactic model with three categories.

4 Categories for Subject-oriented Economic *Bildung*

As outlined above, German VET curricula start from typical work and business situations and systematically define the competences individuals require (see section 3.2). In contrast, *Reflexive Business and Economic Education* as described by Tafner (2015, 2019, 2020, 2024a, 2024b) and Tafner and Casper (2022) turns the tables and puts the individual – the subject – as a social being at the center of its didactics. The underlying model is described briefly below.

The starting point and end of this approach is *Bildung*, which consists of maturity and *identity development* of the subject, who is embedded in society, culture, and nature (see section 2.1). Maturity means rejecting any form of paternalism, exploitation, or instrumentalization, in order to avoid the subject being sucked into the trap of other-direction (Zabeck, 2004, p. 9). *Bildung* and economic and business education seek to empower learners to comprehend the world and find a balance between their own and others' aspi-

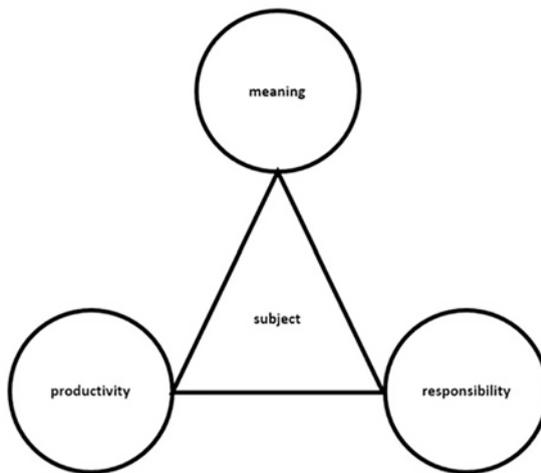
rations. Although consciousness is accessible solely to the subject, it is influenced by social interactions (Mead, 1934/1967; functions 1 and 3 in section 2.3). *Bildung* aims to open up a pluralistic world with diverging thoughts and theories. According to Biesta (2017, p. 8) “the challenge is to exist in the world without considering oneself as center, origin, or ground of the world”. Both theory and experience are relevant for our descriptive and normative understanding of the world (Keynes, 1936/1997, p. 383). In contrast to mainstream economics, *Bildung* does not claim to be value-free but will strive for three equal goals: solidarity (because the subject is a social being), autonomy (because the subject is an individual being), and participation (because the subject is both individual and social) (Klafki, 1996; KMK, 2021, mandate of *Bildung* in section 2.4). Individuals and society have to develop an idea of a meaningful life worth living and make their choices accordingly.

The underlying model is based on ideas from humanistic psychology and Catholic social teachings, and can be understood as a subject-oriented refinement of the TCI model (see figure 3): Here the I (subject) is in the center. It must balance inner and outer reality (Cohn, 1975/2013; Erikson, 1966; Goffman, 1959; Krappmann, 1969; Mead, 1934/1967; see section 2.3). Because the subject is taken as the starting point, IT (theme) is replaced by *productivity* – the perspective is now subject-oriented (*Bildung*) (see section 2.4) – to generate a reflexive self-project for personal development towards self-actualization (self-realization) (Giddens, 1991; Gini, 1998; Mollenhauer, 1983; see section 2.3). In this perspective WE becomes *responsibility* to oneself, others, and the environment and defines personal singularity and/or *identification* with social groups (Erikson, 1966; Giddens, 1991; Goffman, 1959; Tajfel & Turner, 1986/2004; see section 2.3). The TCI model also includes *meaning* because the subject ultimately wants to find *meaning* in their life – to construct a continuous thread of meaning throughout their biography (Erikson, 1966; Giddens, 1991; Hausser, 1995; Straub, 2000; see section 2.3). The triangle indicates that the three objectives must be brought into equilibrium, to reconcile both parts of the self-concept – the subject and the society – and to achieve personal fulfilment (Keupp et al, 2013; Straub, 2000; see figure 2). If these three objectives are pursued reflexively then the descriptive, normative, and emotional elements merge and personal, social, economic, and ecological responsibility can be pursued pedagogically and didactically (KMK, 2021).

Figure 4 illustrates this pedagogical-didactic proposal: *Bildung* requires the subject to balance *productivity*, *responsibility*, and *meaning*. Human nature is characterized by contradictions that the subject must reconcile. The biggest contradiction is that between life and death, which requires us to learn to live with our own mortality yet still find meaning in life (Frankl, 2017, pp. 118–123; Fromm, 1947/2020a, pp. 54–66). The second contradiction is that life is too short to realize all our potentials. We feel the pressure of time, especially at work; we know that we are unable to achieve all we would wish to. At the same time that finality is also what lends value and meaning to our lives and our vocational choices. Ultimately, as human beings, we have to learn to cope with being alone. The subject may be a socially embedded being, but his or her consciousness is his or hers alone. As autonomous beings we are alone yet we cannot bear to be alone (Fromm, 1947/2020a, pp. 54–59). On top of these inherent contradictions, others arise through our embedding in the relentlessly calculating world of work and economy. Both in the role of provider and provided-for, the subject experiences the self as embedded between self-determination and other-direction, self-actualization and instrumentalization, liberty and justice,

power and powerlessness. Under the pressure of objectifying efficiency and rationalization, this can lead to a self-objectification divorced from experienced *identity*. The subject can be overwhelmed by such expectations. But the subject should be enabled to unfold their own subjective potential, in order to deal productively, responsibly, and meaningfully with the available and unavailable. The pedagogical task is to reflexively integrate the three levels into teaching. They are described briefly below.

Figure 4: Objectives of reflexive business and economic education



4.1 Productivity

Productivity is essential, because the subject is a physical being. The individual needs means to survive – and this is just as true for the community and the society. In this respect, real-life economy – considered to be a cultural phenomenon – determines the conditions under which those means are procured (Tafner, 2019). Productivity in the sense used here should not be confused with the economic productivity (efficiency of production) discussed in mainstream economics (Robbins, 1932, p. 16). In general, economic and business education one-sidedly emphasizes efficiency and economic productivity. Efficiency can be a helpful objective – but can be misunderstood as the only or most important goal of vocational education. It can lead to better performance but also to exploitation, it can avoid waste but accelerate the consumption of resources.

Being productive in the humanist sense – which is the point here – means employing one's own powers in such a way as to realize one's own potential. Productivity is an attitude rather than an activity. So, the point is to develop an attitude that allows one to employ one's powers freely, autonomously, and responsibly (Fromm, 1947/2020a, pp. 98–107). Fromm (1950, p. 91) states: "While it is true that man's productiveness can create

material things, works of art, and systems of thought, by far the most important object of productiveness is man himself.” (see also Fromm, 1947/2020a, p. 107). In other words, productivity means employing one’s own intellect and emotions in such a way that one’s own possibilities are realized. This is not ultimately about work, but about an attitude that is also reflected in work. The meaning of work is found less in the profession itself than in the way the work is done. The central thing is how the uniqueness of the subject is expressed – and that is independent of the type of work. Instead, it is the existence of the subject that grants the work validity (Frankl, 2017, p. 167). In his encyclical, Pope John Paul II writes: “The sources of the dignity of work are to be sought primarily in the subjective dimension, not in the objective one” (IOANNES PAULUS PP. II, 1981). That stands in clear contradiction to the human capital theory of mainstream economics, which treats the human as means and object rather than end and subject. The Pope continues: “It only means that the primary basis of the value of work is man himself, who is its subject” (IOANNES PAULUS PP. II, 1981). Enjoyment can also generate efficiency if the subject recognizes that the work is accomplished better and more quickly. But if efficiency is ordered from above it can become a burden and lead to exploitation of the working person if ever more output is demanded in order to meet targets. Efficiency has no intrinsic value of its own. We must always ask why and for whom the work is efficient. Efficiency must always be paired with responsibility (Tafner, 2023, 2024; Ulrich, 2008).

Humanistic psychology points out that our competitive society has negative effects on productivity, for example in the idea that one must accumulate as much knowledge and ability as possible. Competency becomes a commodity to accumulate in order to sell oneself as well as possible (Biesta, 2017, p. 90; Fromm, 1947/2020a, p. 92). That which can be marketed is developed, at the expense of other potential within the subject. Alongside this “Marketing Orientation” (Fromm, 1950, p. 67) duty paradoxically plays a central role in our culture. Self-actualization is denigrated and suppressed as self-seeking (Fromm, 1947/2020a, p. 143). Two ideas predominate: “I am what I have” and “I am as you desire me” (Fromm, 1950, p. 136). Here, success, material affluence, career, and status become expectations to be fulfilled. It is striking that these two contradictory principles appear together in one and the same culture. This can lead to confusion and prevent the subject from realizing their potential (Fromm 1947/2020a, p. 144).

4.2 Responsibility

As the individual is always socially embedded, he/she also has to answer the question of *responsibility* (cf. figure 4). Klafki (1996, p. 245) argues that *the meaning of performance can never be entirely inherent*. The subject is legally and morally responsible for their actions (and non-actions) to themselves, to others, and to the environment. Responsible action seeks to resolve this threefold challenge, and therefore shaping a vocational ethos must also be a crucial goal of VET (cf. functions 3 and 4 in section 2.3). This normative setting influences the ethical reasoning, with certain ethical theories failing to satisfy these normative requirements (Tafner, 2020). Tafner turns to Ulrich’s integrative business ethics (2008) and McCloskey’s (2011) virtue ethics. Ulrich argues, in the sense of Kant’s categorical imperative, that *humanity* must always be the means as well as the end. The meaning of this end needs to be reflected both individually and in public discourse. Humanistic

productivity, meaning, and responsibility are interconnected and always have to be addressed simultaneously.

Responsibility and being belong together, because being always relates to others (Biesta, 2017, p. 8; Frankl, 2017, p. 31; 2023, pp. 11–13). As the founder of socio-economics, Amitai Etzioni (1988, p. 9), puts it: “The I’s need a We to be.” Responsibility relates to life, which is always presenting us with problems to solve (Frankl, 2017, p. 66–78). *Identity* also means establishing self-love, a positive relationship to oneself. This is also found in the Judeo-Christian commandment to “Love thy neighbour as thyself!” (Leviticus 19:18 and Matthew 22:37–39). Self-love is not egotism, but the precondition for personal development and love of others. This is not a demand for altruism: one is not required to love others more than oneself. Herein lies a significant departure from the neo-classical principle of maximization. The subject is required to reconcile the moral imperatives with their own need for self-actualization. The subject has a fundamental moral sense because they have learned – through upbringing, socialization, and enculturation – what the dos and don’ts are in a particular culture and society. But if the subject wants to listen to their conscience they must listen to themselves, and that is often difficult in our culture. People like to listen to others, but not to themselves (Fromm, 1947/2020a, pp. 161–176).

4.3 Meaning

Life is both a question and an answer. The meaning of life is to answer the stream of questions that life poses. And these may indeed be answered in and through action. The answers are always concrete within the here and now of a unique specific person: responsibility *ad personam* and *ad situationem* (Frankl, 2023, p. 13). So the question of the meaning of life is meaningless. Instead it is life itself that asks the questions. The subject must find answers to them (Frankl, 2017, p. 107). These are situations where morality and self-actualization need to be reconciled. That is no easy matter in an individualized society, where, as Honneth puts it, self-actualization has become the ideology and productive force of a deregulated economic system (Honneth, 2002, p. 154). Here we see emancipation and maturity transformed from ideals into compulsion, from aspiration to demand (p. 155). That is difficult for young people, especially when they compare themselves with others or with idols – and find themselves to be inadequate, not pretty enough, not successful enough. Comparison distracts from the subject’s own unique existence. But the value of the subject is absolute in its uniqueness.

5 Feasibility of Fostering *Identity Development* in VET Schools

This paper explores how *identity development* can be fostered in VET, on the basis that the learning subject is a material, mental, social, and individual being – and as such must reflect upon and shape their relationship to the world. The latter activity is the heart of *identity development*. In the world of work, a vocational self-concept and ethos are required, in order to ensure both agency and coherence and continuity of the social and individual components of *identity*. As Humboldt’s concept of *Bildung* shows, *Bildung* can be understood as fostering vocational *identity development*. On the basis of empirical studies and

VET curricula, the contribution demonstrates that vocational *identity development* is neglected at German VET schools despite their mandate to pursue *Bildung*. A case study illustrates the need for support in multiple everyday *identity* conflicts. Provision of support could potentially boost apprentices' motivation and performance and improve the attractiveness of VET. To deal with *identity* issues in VET practice, the author suggested a simple model building on the categories of meaning, productivity, and responsibility.

Once VET teachers have adopted a didactic way of thinking that takes the subject's point of view into account, they may ask whether dealing with all this is their task at all, and if it is, how it could be implemented. This also implies questions: Which didactic methods are adequate? And what training is required for VET teachers?

First of all, everyone – be they employees, self-employed, or unemployed – needs to be able to balance and shape their (vocational) *identity*. This is especially true of VET teachers, who have a very complex and challenging workplace. So balancing and shaping *identity* is a basic psychological capacity we all require for our daily life, but it may be insufficiently developed or unconscious. To enable (student) teachers to support others to develop *identity*-related competences it is necessary to promote these competences explicitly in (student) teacher training. This is also likely to reduce (student) teacher dropouts due to mental illness. Professional psychological expertise can be helpful especially when severe chronic difficulties persist, but it is not the health system's task to coach us in our daily lives. However, statistics show that prevalence of mental illness is rising and that the health system is overloaded (Hanewinkel et. al., 2024; Moor et al., 2024). It is therefore positive if VET schools can prevent young people from becoming mentally ill and unable to work in the first place.

Second, the German VET curricula do not need to be revised because the mandate of *Bildung* already covers the objective of *identity development* (see section 2.4). Learners will try to shape and balance their *identity* even without the support of VET, but in that case the VET school will not be able to influence the process in a pedagogically desirable way. Furthermore, because *identity development* is closely related to agency, it is essential to foster it to achieve the overall goal of *vocational action competence*. For this purpose, the curricula need to be interpreted through the lens of *identity* theory. In the German VET system it is assumed that the work and business processes included in the curricula (KMK, 2021) deal with all the central practical workplace requirements. As Hendrik's case demonstrates, however, many challenges are not in fact covered. This could be overcome by using learners' narratives about the challenges they experience in the workplace instead of modeled ideal-typical situations. This would also boost connectivity between learning environments.

Empirical evidence shows that VET schools and teachers need support in these processes. One important starting point is to understand action orientation as subjective agency rather than action regulation. That is a necessary precondition for supporting the psychological functions of *identity* work. Theory-driven analysis of cases and situations can contribute to achieving this goal. A holistic understanding of the theoretical concept of *identity development* would allow VET teachers to address the individual implications at micro level and encourage learners to discover their subjectivity. The case study demonstrates that the concept of *identity* is complex but comprehensible.

Concerning the question of adequate didactic approaches, it is important to note that the subject is responsible for the process of *identity development*. The teacher's task is to arrange interactions and reflection that allow learners to enhance their self-awareness (Thole, 2021, pp. 263–307; Thole, 2020). Group discussions and individual reflection are both crucial, and should alternate. For group settings, theme-centered interaction (TCI) is a proven concept that is suited to deal with *identity* problems. In many VET schools self-directed and individualized learning is already moving forward. More *identity*-specific educational trials under scientific guidance and evaluation would be helpful to develop them further.

Concerning VET teacher training, the authors believe that it will not be sufficient to train teachers and adapt school-specific curricula, because teaching and its traditions are deeply entrenched and hard to change. However, deep and quick cultural turns are possible, especially in times of disruption. Teachers and heads will only change their internalized vocational self-concept through external pressures, for instance because of high drop-out rates, mental illness (among learners or teachers themselves), or a lack of appropriate applicants for apprenticeship. Currently, more and more employers are discovering that retaining staff by supporting their personal development is a means to overcome a shortage of skilled labor. The required change can be brought about in social interaction with relevant stakeholders (Mead, 1934/1967). Evolution of the VET system and educators' and trainers' skills will thus go hand in hand. It is therefore crucial to intensify the discourse about vocational *identity development* among VET stakeholders.

References

- Aebli, H. (2006). *Zwölf Grundformen des Lehrens: Eine allgemeine Didaktik auf psychologischer Grundlage: Medien und Inhalte didaktischer Kommunikation, der Lernzyklus [Twelve basic forms of teaching: General didactics based on psychology: Media and content of didactic communication, the learning cycle]* (13th ed.). Klett-Cotta.
- Arnold, R. (1997). *Betriebspädagogik [Workplace pedagogy]*. Erich Schmidt.
- Backes-Haase, A., & Klinkisch, E. (2015). Das kompetente Subjekt? – Implizite Tendenzen zur Verdinglichung in der beruflichen Bildung [The competent subject? – Implicit tendencies towards reification in VET]. *bwp@-online*, 29, 1–27. http://www.bwpat.de/ausgabe29/backes-haase_klinkisch_bwpat29.pdf
- Bandura, Albert (1989). Human agency in social cognitive theory. *American Psychologist*., 44(9), 1175–1184. <https://doi.org/10.1037/0003-066X.44.9.1175>
- Baethge-Kinsky, V. (2020). Digitized Industrial Work: Requirements, Opportunities, and Problems of Competence Development. *Frontiers in Sociology*, 5(33), 1–13. <https://doi.org/10.3389/fsoc.2020.00033>
- Beck, U. (1986). *Risikogesellschaft: Auf dem Weg in eine andere Moderne. Suhrkamp. [Risk society: Towards a new modernity]*. Suhrkamp.
- Beck, U., & Brater, M. (1977). Problemstellungen und Ansatzpunkte einer subjektbezogenen Theorie der Berufe [Problems and starting points of a theory of vocations]. In U. Beck (Ed.), *Die soziale Konstitution der Berufe [The social constitution of vocations]* (pp. 5–62). Campus.

- Beicht, U., Krewerth, A., Eberhard, V., & Granato, M. (2009). *Viel Licht – aber auch viel Schatten: Qualität dualer Berufsausbildung in Deutschland aus Sicht der Auszubildenden* [A lot of light – but also shadow: Quality of dual track vocational apprenticeship in Germany from the point of view of apprentices]. BIBB. <https://www.bibb.de/dienst/publikationen/de/2270>
- Bundesinstitut für Berufsbildung (BIBB) (2024). *Datenreport zum Berufsbildungsbericht 2024: Informationen und Analysen zur Entwicklung der beruflichen Bildung* [Data report for the vocational training report 2024: Information and analyses on trends in vocational training]. BIBB. <https://www.bibb.de/dokumente/pdf/bibb-datenreport-2024-final.pdf>
- Biesta, G. J. (2017). *The rediscovery of teaching*. Routledge Taylor & Francis Group.
- Billett, S., & Somerville, M. (2004). Transformations at work: Identity and learning. *Studies in Continuing Education*, 26(2) 309–326. <https://doi.org/10.1080/158037042000225272>
- Blankertz, H. (1963). *Berufsbildung und Utilitarismus: Problemgeschichtliche Untersuchungen* [Vocational education and utilitarianism: Studies on historical problems]. Schwann.
- Bretschneider, M., & Schwarz, H. (2015). Die Ordnung der Berufsbildung als vergeblicher Versuch – Ausbildungsordnungen zwischen Standards und Aushandlung [The ordering of VET as futile trial – apprenticeship directives between standards and negotiation]. *bwp@-online*, 29, 1–21. http://www.bwpat.de/ausgabe29/bretschneider_schwarz_bwpat29.pdf
- Bronfenbrenner, U. (1979). *The ecology of human development: Experiments by nature and design*. Harvard Univ. Press.
- Busshoff, L. (2001). Zum Konzept des beruflichen Übergangs – eine theoretische Erörterung mit Bezug auf Supers Ansatz zur Erklärung der Laufbahnentwicklung [About the concept of vocational transitions – a theoretical essay with reference to Super's approach of career development]. *International Journal for Educational and Vocational Guidance*, 1, 59–76.
- Casper-Kroll, T. (2011). *Berufsvorbereitung unter entwicklungspsychologischer Perspektive: Theorie, Empirie und Praxis* [VET preparation from the point of view of developmental psychology: Theory, empiricism and practice] VS Verl. für Sozialwissenschaften.
- Cohn, R. (2013). *Von der Psychoanalyse zur themenzentrierten Interaktion: Von der Behandlung einzelner zu einer Pädagogik für alle* [From psychoanalysis to theme-centered interaction: From treatment of individuals to pedagogy for all] (17th ed.). Klett-Cotta. (Original work published in 1975).
- Dewey, J. (1997). *Experience and education*. Touchstone/Kappa. (Original work published in 1938).
- Donovan, D. T., Brown, T. J., & Mowen, J. C. (2004). Internal benefits of service worker customer orientation: Job satisfaction, commitment, and organizational citizenship behaviors. *Journal of Marketing*, 8(1), 128–146.
- Dörig, R. (2003). *Handlungsorientierter Unterricht: Ansätze, Kritik und Neuorientierung aus bildungstheoretischer, curricularer und instruktionspsychologischer Perspektive* [Action orientated teaching: Approaches, criticism and new orientation from the perspective of theory of Bildung and curricular and instructive psychology]. WiKu-Verlag.

- Duemmler, K., Caprani, I., & Felder, A. (2017). *Berufliche Identität von Lernenden im Detailhandel: Studienergebnisse und Schlussfolgerungen für die Berufsbildung – ein Ratgeber für Lehrpersonen und Berufsbildner/-innen* [Vocational identity of learners in the retail sector: Study results and conclusions for VET – a guidebook for teachers and actors in VET]. Lausanne: Eidgenössisches Hochschulinstitut für Berufsbildung. https://www.ehb.swiss/sites/default/files/downloads/ratgeber_berufliche_identitaet_d.pdf
- Eisenhardt, K. (1989). Building Theories from Case Study Research. *The Academy of Management Review*, 14(4), 532–550.
- Erikson, E. H. (1966). *Identity and the Life Cycle*. W. W. Norton & Company.
- Etzioni, A. (1988). *The moral dimension: Toward a new economics*. Free Press.
- European Centre for the Development of Vocational Training (2021). *The role of work-based learning in VET and tertiary education: Evidence from the 2016 EU labour force survey*. European Centre for the Development of Vocational Training. <https://www.cedefop.europa.eu/en/publications/5580>
- Farau, A., & Cohn, R. (1984). *Gelebte Geschichte der Psychotherapie: Zwei Perspektiven* [Experienced history of psychotherapy: Two perspectives]. Klett-Cotta.
- Fischer, A., & Hantke, H. (2019). Potenzielle “Familienähnlichkeit” zwischen der sozioökonomischen Bildung und dem Lernfeldansatz der wirtschaftsberuflichen Bildung [Potential “family similarity” between socioeconomic education and the learning field approach in economic vocational education]. In Fridrich, C., Hedtke, R., & Tafner, G. (Eds.), *Historizität und Sozialität in der sozioökonomischen Bildung* [Historicity and sociality in socioeconomic education] (pp. 81–106). Springer VS. https://doi.org/10.1007/978-3-658-22801-9_5
- Frankl, V. (2017). *Ärztliche Seelsorge: Grundlagen der Logotherapie und Existenzanalyse* [Medical spiritual guidance: Main features of logotherapy and existential analysis]. (7th ed.). DTV.
- Frankl, V. (2023). *Der unbewusste Gott: Psychotherapie und Religion* [The unconscious god: Psychotherapy and religion] (19th ed.). DTV.
- Frey, H.-P., & Hausser, K. (1987). *Identität: Entwicklungen psychologischer und soziologischer Forschung* [Identity: Developments in psychological and sociological research]. Enke.
- Friedrich, M. (2015). *Moralische Erziehung oder Indoktrination durch ökonomische Bildung? Eine empirische Studie über Einflüsse ökonomischer Bildung auf die moralische Entwicklung von Lernenden* [Moral education or indoctrination by means of economic education? An empirical study on the influence of economic education on learners' moral development]. Verl. für Nationalökonomie Management und Politikberatung.
- Fromm, E. (1950). *Man for Himself: An Inquiry into the Psychology of Ethics* (2d ed.), Rinehart.
- Fromm, E. (2020a). *Den Menschen verstehen: Psychoanalyse und Ethik* (4th ed.). DTV. (Original English: *Man for Himself: An Inquiry into the Psychology of Ethics*, Rinehart, 1947).
- Fromm, E. (2020b). *Die Furcht vor der Freiheit* (24th ed.). DTV. (Original English: *Escape From Freedom*, Farrar & Rinehart, 1941, later republished under the title *The Fear of Freedom*).
- Fuller, A., & Unwin, L. (2003). Learning as apprentices in the contemporary UK workplace: Creating and managing expansive and restrictive participation. *Journal of Education and Work*, 16(4), 407–426.
- Giddens, A. (2017). *The Constitution of Society: Outline of the Theory of Structuration*. Polity Press. (Original work published in 1984).

- Giddens, A. (1991). *Modernity and self-identity: Self and society in the late modern age*. Polity Press.
- Gini, A. (1998). Work, Identity and Self: How we are formed by the work we do. *Journal of Business Ethics*, 17, 707–714.
- Goffman, E. (1959). *The presentation of self in everyday life*. Anchor Books.
- Gramlinger, F., & Tramm, T. (2003). Lernfeldansatz zwischen Feiertagsdidaktik und Alltagstauglichkeit [Learning field approach between holiday didactics and suitability for everyday use]. Editorial. *bwp@-online*, 4, 1–3. http://www.bwpat.de/ausgabe4/editorial_bwpat4.pdf
- Graupe, S. (2012). The power of ideas: The teachings of economics and its image of man. *Journal of Social Science Education*, 11(2), 60–85. <https://doi.org/10.4119/UNIBI/jsse-v11-i2-1200>
- Graupe, S. (2014). Standing on Mount Lu: How economics has come to dominate our view of culture and sustainability – and why it shouldn't. In Seibt, J., & Garsdal, J. (Eds.) *How is Global Dialogue Possible? Foundational Research on Value Conflicts and Perspectives for Global Policy* (pp. 523–550). De Gruyter.
- Gruschka, A. (1985). *Wie Schüler Erzieher werden: Studie zur Kompetenzentwicklung und fachlichen Identitätsbildung in einem doppeltqualifizierenden Bildungsgang des Kollegschulversuchs Nordrhein-Westfalen* [How students become nursery nurses: A study on competence development and vocational identity development in a double-qualifying course of the VET school pilot project North Rhine–Westphalia]. Büchse der Pandora.
- Hacker, W. (1994). *Action regulation theory and occupational psychology: Review of German empirical research since 1987*. Inst. für Allg. Psychologie und Methodenlehre.
- Hacker, W. (2009). *Arbeitsgegenstand Mensch: Psychologie dialogisch-interaktiver Erwerbsarbeit: Ein Lehrbuch* [Man as work object: Psychology of dialogic-interactive employment: An educational book]. Pabst Science Publishers.
- Handayani, S., Suharnomo, S., Yuniawan, A., Wahyudi, S., & Wikaningrum, T. (2017). A systematic literature review of managing workplace diversity for sustaining organizational competitive advantage. *International Journal of Mechanical Engineering and Technology*, 8(12), 398–406.
- Hanewinkel, R., Hansen, J., & Neumann, C. (2024). *Gesundheit und Gesundheitsverhalten von Kindern und Jugendlichen in Deutschland – Ausgewählte Ergebnisse des Präventionsradar 2023/2024* [Health and health behavior of children and adolescents in Germany – selected results of the prevention radar 2023/2024]. <https://caas.content.dak.de/caas/v1/media/77380/data/52da8fbc93cf8d65b021463d306bf470/praeventionsradar-ergebnisbericht-2023-2024.pdf>
- Hausser, K. (1995). *Identitätspsychologie* [Identity psychology]. Springer.
- Havighurst, R. J. (1974). *Developmental tasks and education* (3rd rev. ed.). McKay.
- Heinemann, L., Maurer, A., & Rauner, F. (2009). *Engagement und Ausbildungsorganisation – Einstellungen Bremerhavener Auszubildender zu ihrem Beruf und ihrer Ausbildung: Eine Studie im Auftrag der Industrie und Handelskammer Bremerhaven* [Commitment and organization of apprenticeship – attitudes of apprentices from Bremerhaven towards their vocation and apprenticeship: A study for the Chamber of Industry and Commerce Bremerhaven]. Universität Bremen i:bb. https://www.researchgate.net/publication/285740129_En

gagement_und_Ausbildungsorganisation_-_Einstellungen_Bremerhavener_Aus_zubildender_zu_ihrem_Beruf_und_ihrer_Ausbildung

- Heinrichs, K., Wuttke, E., & Kögler, K. (2022). Berufliche Identität, Identifikation und Beruflichkeit – Eine Verortung aus der Perspektive einer theoriegeleiteten empirischen Berufsbildungsforschung [Vocational identity, identification and occupationalism – a localization from the point of view of a theory-led empirical vocational educational research]. *bwp@-online*, Profil 7, 1–29. https://www.bwpat.de/profil7_m_innameier/heinrichs_etal_profil7.pdf
- Heinzer, S., & Reichenbach, R. (2013). *Die Entwicklung der beruflichen Identität: Schlussbericht [Development of vocational identity: Final report]*. Universität Zürich. https://www.ifef.uzh.ch/dam/jcr:00000000-272b-1a72-0000-00002d44d5b6/Schlussbericht_zum_BBT-Projekt_Berufliche_Identitaet.pdf
- Helsper, W. (1991). Das imaginäre Selbst der Adoleszenz: Der Jugendliche zwischen Subjektentfaltung und dem Ende des Selbst [The imaginary self of adolescence: Youth between subjectivation and the end of the self]. In W. Helsper (Ed.), *Jugend zwischen Moderne und Postmoderne [Youth between modernity and postmodernity]* (pp. 73–74) Leske + Budrich.
- Hericks, U. (2006). *Professionalisierung als Entwicklungsaufgabe: Rekonstruktionen zur Berufseingangsphase von Lehrerinnen und Lehrern [Professionalization as developmental task: Reconstructions of teachers' initial vocational phase]* (habilitation thesis, Universität Hamburg). VS Verl. für Sozialwiss. <https://doi.org/10.1007/978-3-531-90060-5>
- Heskett, J., Jones, T., Loveman, G., Sasser, W. E., & Schlesinger, L. (1994). Putting the Service-Profit Chain to work. *Harvard Business Review*, 72(2), 164–174.
- Hoffmann, D., & Neuner, G. (Eds.) (1997). *Auf der Suche nach Identität: Pädagogische und politische Erörterungen eines gegenwärtigen Problems [In search of identity: pedagogical and political essays on a contemporary problem]*. Dt. Studien-Verl.
- Holland, J. L. (1985). *Making vocational choices: A theory of vocational personalities and work environments* (2nd ed.). Prentice-Hall.
- Holzkamp, K. (1995). *Lernen: Subjektwissenschaftliche Grundlegung [Learning: Subject-based scientific foundation]*. Campus-Verlag.
- Honneth, A. (Ed.) (2002). *Befreiung aus der Mündigkeit: Paradoxien des gegenwärtigen Kapitalismus. [Liberation from maturity: Paradoxes of contemporary capitalism]*. Campus.
- Humboldt, W. v. (2000). Theory of Bildung, transl. by Horton-Krüger, G. (2000). In Westbury, I., (Ed.), *Teaching as a reflective practice: The German didaktik tradition*, (pp. 57–62). Lawrence Erlbaum Assoc., (Original work published in German in 1792).
- Kaak, S., Kracke, B., Driesel-Lange, K., & Hany, E. (2013). Diagnostik und Förderung der Berufswahlkompetenz Jugendlicher [Diagnostic and promotion of adolescents' career choice competence]. *bwp@-online*, special no. 6 – Hochschultage Berufliche Bildung, 1–13, http://www.bwpat.de/ht2013/ws14/kaak_etal_ws14-ht2013.pdf
- Kaman, A., & Ravens-Sieberer, U. (2024). *Psychische Gesundheit von Kindern und Jugendlichen durch globale Krisen belastet [Mental health of children and adolescents impaired by global crises]*. Universitätsklinikum Hamburg-Eppendorf (UKE), press release, April 12, 2024 https://www.uke.de/allgemein/presse/pressemitteilungen/detailseite_160448.html

- Keupp, H., Ahbe, T., Gmür, W., Höfer, R., Mitzscherlich, B., Kraus, W., & Straus, F. (2013). *Identitätskonstruktionen: Das Patchwork der Identitäten in der Spätmoderne [Identity constructions: The patchwork of identities in the late modern age]* (5th ed.). Rowohlt.
- Keynes, J. M. (1997). *The general theory of employment, interest and money*. Prometheus Books. (Original work published in 1936)
- Kirpal, S., Brown, A., & Dif, M. (2007). The Individualisation of Identification with Work in a European Perspective. In Brown, A., Kirpal, S., & Rauner, F. (Eds.), *Identities at work* (pp. 285–314). Springer.
- Kolb, D. (1984). *Experiential learning: Experience as the source of learning and development*. Prentice-Hall.
- Klafki, W. (1996). *Neue Studien zur Bildungstheorie und Didaktik: Zeitgemäße Allgemeinbildung und kritisch-konstruktive Didaktik [New studies on theory of Bildung and didactics: Contemporary general education and critical-constructive didactics]* (5th ed.). Beltz.
- Klotz, V., Billett, S., & Winther, E. (2014). Promoting workforce excellence: formation and relevance of vocational identity for vocational educational training. *Empirical. Research in Vocational. Education and Training*, 6(1), 1–20. <https://doi.org/10.1186/s40461-014-0006-0>
- Krappmann, L. (1969). *Soziologische Dimensionen der Identität. Strukturelle Bedingungen für die Teilnahme an Interaktionsprozessen [Sociological dimensions of identity. Structural conditions for participating in interaction processes]*. 4th ed.,. Klett-Cotta (first edition 1975).
- Krewerth, A. (2010). *Handlungsstrategien Auszubildender bei Problemen in der Ausbildung. Ergebnisse der BIBB-Studie "Ausbildung aus Sicht der Auszubildenden" 2008. [Action strategies of apprentices in case of conflicts. Results from the BIBB-study "Apprenticeship from the point of view of apprentices" 2008]*. Herbsttagung der Sektion Berufs- und Wirtschaftspädagogik der DfGE. [Autumn conference of the DfGE-section vocational and economic pedagogy] Vienna, 2010.
- Kultusministerkonferenz (KMK) (2021). *Handreichung für die Erarbeitung von Rahmenlehrplänen der Kultusministerkonferenz für den berufsbezogenen Unterricht in der Berufsschule und ihre Abstimmung mit Ausbildungsordnungen des Bundes für anerkannte Ausbildungsberufe [Recommendation for designing framework curricula for vocational teaching at VET schools and alignment with federal apprenticeship directives for recognized vocations]*. Berlin: Kultusministerkonferenz. https://www.kmk.org/fileadmin/veroeffentlichungen_beschluesse/2021/2021_06_17-GEP-Handreichung.pdf
- Kutscha, G. (2011). Bildung im Medium des Berufs? Ein kritisch-konstruktiver Beitrag zur Auseinandersetzung mit der bildungstheoretischen Grundlage der Berufs- und Wirtschaftspädagogik durch Herwig Blankertz unter besonderer Berücksichtigung neuerer Beiträge zur Theorie der beruflichen Bildung [Bildung in the medium of vocation? A critical-constructive essay on the Bildung-related theoretical basics of vocational and economic pedagogy by Herwig Blankertz with reference to newer papers about VET theory]. *Pädagogische Korrespondenz*, 43, 65–83. urn:nbn:de:0111-opus-88253
- Kutscha, G. (2015). Erweiterte moderne Beruflichkeit – eine Alternative zum Mythos "Akademisierungswahn" und zur Employability-Maxime des Bologna-Regimes [Extended modern vocationalism – an alternative to the myth of "overacademization"]

- and to the employability dictum of the Bologna-regime]. *bwp@-online*, 29, 1–24. <https://www.bwpat.de/ausgabe/29/kutscha>
- Kutscha, G., Besener, A., & Debie, S. (2009). *Probleme der Auszubildenden in der Eingangsphase der Berufsausbildung im Einzelhandel – ProBE: Abschlussbericht und Materialien zum Forschungsprojekt [Problems of apprentices in the initial phase of apprenticeship in the retail business – ProBE: Final report and materials of the research project]*. Univ. Duisburg-Essen. urn:465-20100114-084713-9
- IOANNES PAULUS PP. II (1981). *Laborem Exercens*. https://www.vatican.va/content/john-paul-ii/en/encyclicals/documents/hf_jp-ii_enc_14091981_laborem-exercens.html
- Lange, S. (2019). *Die Berufsausbildungseingangsphase: Anforderungen an Auszubildende und ihre Bewältigungsstrategien am Beispiel des Kfz-Mechatronikerhandwerks [Entry into VET: Demands on apprentices and their coping strategies using the example of the automotive mechatronics technicians]*. wbv.
- Lenzen, D. (1991). Moderne Jugendforschung und postmoderne Jugend: Was leistet noch das Identitätskonzept? [Modern youth research and postmodern adolescence: Is there still benefit in the identity concept?]. In W. Helsper (Ed.), *Jugend zwischen Moderne und Postmoderne [Youth between modernity and postmodernity]* (pp. 41–56). Leske + Budrich.
- Lewalter, D., Krapp, A., & Wild, K.-P. (2001). Interessenentwicklung in der beruflichen Erstausbildung [Development of interest in vocational apprenticeship]. In Beck, K., & Krumm, V. (Eds.), *Lehren und Lernen in der beruflichen Erstausbildung: Grundlagen einer modernen kaufmännischen Berufsqualifizierung, [Teaching and learning in the vocational apprenticeship: Basics of a modern commercial vocational qualification]* (pp. 11–35). Leske + Budrich.
- Linton, R. (1936). *The study of man: An introduction*. Appleton.
- Lotz, W. (2012). Beredtes Schweigen: Themenzentrierte Prozessanalyse als Reflexionsinstrument professioneller Praxis. *Themenzentrierte Interaktion*, 26(2), 46–55.
- McCloskey, N. (2011). Hobbes, Rawls, Nussbaum, Buchanan, and all seven of the virtues. *Journal des économistes et des études humaines*, 1, art. 2. <https://doi.org/10.2202/1145-6396.1249>
- Mead, G. H. (1967). *Mind, self, and society: From the standpoint of a social behaviorist*. Univ. of Chicago Press. (Original work published in 1934).
- Meyer, R. (2014). Berufsorientierung im Kontext Lebenslangen Lernens – berufspädagogische Annäherungen an eine Leerstelle der Disziplin. [Vocational orientation in the context of lifelong learning – VET-pedagogical thoughts on a blind spot of the discipline]. *bwp@-online*, 27, 1–23. http://www.bwpat.de/ausgabe27/meyer_bwpat27.pdf
- Miller, G., Galanter, E., and Pribram, K. H. (1960). *Plans and the structure of behavior*. Holt.
- Mollenhauer, K. (Ed.) (1983). *Forgotten connections: On culture and upbringing*. (1st Engl. transl. 2013). Routledge.
- Moor, I., Weber, M., & Richter, M. (2024). Kinder- und Jugendgesundheit – Ressourcen und Potenziale der internationalen Studie Health Behaviour in School-aged Children [Child and adolescent health – resources and potentials of the international study HBSC]. *Journal of Health Monitoring*, 9(1), 1–127, <https://doi.org/10.25646/11865>

- Moreno, J. L. (1961). The role concept, a bridge between psychiatry and sociology. *The American Journal of Psychiatry*, 118, 513–523.
- Nell-Breuning, O. v. (1985). *Gerechtigkeit und Freiheit: Grundzüge katholischer Soziallehre [Justice and freedom: Main features of Catholic social education]*. Europa.
- Nerdinger, F. W. (2011). *Psychologie der Dienstleistung [Service psychology]*. Hogrefe.
- Ötsch, W. O., & Kapeller, J. (2010). Perpetuating the Failure: Economic Education and the Current Crisis. *Journal of Social Science Education*, 9(2), 16–25. <https://doi.org/10.4119/UNIBI/jsse-v9-i2-1119>
- Petzold, H., & Mathias, U. (1982). *Rollenentwicklung und Identität: Von den Anfängen der Rollentheorie zum sozialpsychiatrischen Rollenkonzept Morenos [Role development and identity: From the beginnings of role theory to Moreno's social-psychiatric role concept]*. Junfermann.
- Piaget, J. (1970). Piaget's theory. In P. Mussen (Ed.), *Carmichael's handbook of child psychology* (pp. 703–832). Wiley.
- Prenzel, M., Kramer, K., & Drechsel, B. (2001). Selbstbestimmt motiviertes und interessiertes Lernen in der kaufmännischen Erstausbildung – Ergebnisse eines Forschungsprojektes [Self-determined motivated and interested learning in the commercial apprenticeship]. In K. Beck, and V. Krumm (Eds.), *Lehren und Lernen in der beruflichen Erstausbildung: Grundlagen einer modernen kaufmännischen Berufsqualifizierung [Teaching and learning in the vocational apprenticeship: Basics of a modern commercial vocational qualification]* (pp. 37–61). Leske + Budrich.
- Rauner, F., Frenzel, J., Piening, D., & Bachmann, N. (2016). *Engagement und Ausbildungsorganisation: Einstellungen sächsischer Auszubildender zu ihrem Beruf und ihrer Ausbildung [Engagement and apprenticeship organization: Attitudes of Saxon apprentices towards their vocation and their apprenticeship]* Fachgruppe i:BB Universität Bremen. https://comet-vet.com/files/upload/documents/publications/Commitment_Sachsen_Abschlussbericht_final.pdf
- Reetz, L. (1984). *Wirtschaftsdidaktik: Eine Einführung in Theorie und Praxis wirtschaftsberuflicher Curriculumentwicklung und Unterrichtsgestaltung. [Didactics for economics: An introduction to theory and practice of curriculum development and teaching for economics in VET]*. Klinkhardt.
- Robbins, L. (1932). *An essay on the nature and significance of economic science*. Macmillan.
- Rosa, H. (2013). *Social Acceleration: A New Theory of Modernity*. Columbia University Press.
- Ryan, R., & Deci, E. (2000). Self-determination Theory and the Facilitation of Intrinsic Motivation, Social Development and Well-Being. *American Psychologist*, 55(1), 68–78. <https://doi.org/10.1037/110003-066X.55.1.68>
- Savickas, M. (2012). Life Design: A Paradigm for Career Intervention in the 21st Century. *Journal of Counseling & Development*, 90(1), 13–19. <https://doi.org/10.1111/J.1556-6676.2012.00002.X>
- Savickas, M., & Hartung, P. (1996). The Career Development Inventory in Review: Psychometric and Research Findings. *Journal of Career Assessment*, 4(2), 171–181. <https://doi.org/10.1177/106907279600400204>
- Schön, D. A. (1983). *The reflective practitioner: How professionals think in action*. Basic Books.
- Shavelson, R., Hubner, J., & Stanton, G. (1976). Self-concept: Validation of construct interpretations. *Review of Educational Research*, 46(3), 407–441. <https://doi.org/10.3102/00346543046003407>

- Sloane, P., & Dilger, B. (2005). The Competence Clash – Dilemmata bei der Übertragung des “Konzepts der nationalen Bildungsstandards” auf die berufliche Bildung [The competence clash – dilemmas related to the transfer of the “concept of national educational standards” to VET]. *bwp@-online*, 8, 1–32. https://www.bwpat.de/ausgabe8/sloane_dilger_bwpat8.pdf
- Simons, J. (2021). From Identity to Enaction: Identity Behavior Theory. *Frontiers in Psychology*, 12. <https://doi.org/10.3389/fpsyg.2021.679490>
- Stiglitz, J. E. (2002). *Globalization and its discontents*. Norton.
- Straub, J. (2000). Identitätstheorie, empirische Identitätsforschung und die “postmoderne” armchair psychology [Identity theory, empirical identity research and “postmodern” armchair psychology]. *Zeitschrift für qualitative Bildungs-, Beratungs- und Sozialforschung*, 1(1), 167–197.
- Straus, F., & Höfer, R. (1997). Entwicklungslinien alltäglicher Identitätsarbeit [Developmental trends of daily identity work]. In Keupp, H., & Höfer, R. (Eds.), *Identitätsarbeit heute: Klassische und aktuelle Perspektiven der Identitätsforschung [Identity work today: Classical and current perspectives in identity research]* (pp. 270–307). Suhrkamp.
- Super, D. (1990). A Life-Span, Life-Space Approach to Career Development. In D. Brown (Ed.), *Career choice and development: Applying contemporary theories to practice* (2nd ed.) (pp. 197–261). Jossey-Bass.
- Tafner, G. (2015). *Reflexive Wirtschaftspädagogik: Wirtschaftliche Erziehung im ökonomisierten Europa – eine neo-institutionelle Dekonstruktion des individuellen und kollektiven Selbstinteresses [Reflexive business and economic education: Economic education in the economized Europe – a neo-institutional deconstruction of individual and collective self-interest]*. wbv. <https://doi.org/10.3278/9783763970674>
- Tafner, G. (2019). Economic education is socio-economic education: Foundations of a reflexive business and economic education. *International Journal of Pluralism and Economics Education*, 10(4), 318–333. <https://doi.org/10.1504/IJPEE.2019.106098>
- Tafner, G. (2020). Die Angst des Königs vor dem Schachmatt: Klarstellungen zur “Aufklärung” über meinen Aufsatz “Eigennutzmaximierung als Richtschnur moralischen Handelns? Antithesen zu Homanns ökonomischer Wirtschaftsethik“. [The king’s fear of checkmate: Clarifications concerning my paper “Self-interest maximization as guiding principle for moral action? Antitheses to Homanns business ethics”]. *Zeitschrift für Berufs- und Wirtschaftspädagogik*, 116(3), 419–455.
- Tafner, G., & Casper, M. (2022). Understanding economics does not equal understanding the economy: Designing teacher education from a socio-economic perspective. *International Journal of Pluralism and Economics Education*, 13(3), 277–296. <https://doi.org/10.1504/IJPEE.2022.10054379>
- Tafner, G. (2024a). Pluralism and the Desire for Unambiguity: On the Significance of Perception and Ambiguity in Socio-economic Education. In Fridrich, C., Hagedorn, U., Hedtke, R., Mittnik, P., & Tafner, G. (Eds.), *Economy, Society and Politics. Socio-economic and Political Education in Schools and Universities* (pp. 103–130). Springer.
- Tafner, G. (2024b). Reflexive Wirtschaftspädagogik: Doppelt integrative Wirtschaftsethik in der sozioökonomischen Didaktik [Reflexive economics teaching: Doubly integrative economic ethics in socio-economic didactics]. *Zeitschrift für Wirtschafts- und Unternehmensethik*, 25(3), 468–494.

- Tajfel, H., & Turner, J. (2004). The social identity theory of intergroup behavior. In Jost, J., and Sidanius, J., (Eds.), *Political psychology: Key readings* (pp. 367–390) Psychology Press. (Original work published in 1986).
- Thole, C. (2018). Individualisierte Professionalisierung als berufliche Identitätsarbeit in der modernen Arbeitswelt: Berufliche Curricula vom Subjektstandpunkt neu denken [Individualized professionalization as vocational identity work in the modern world of work: Thinking vocational curricula from the point of view of the subject]. In Tramm, T., Casper, M., & Schlömer, T. (Eds.), *Didaktik der beruflichen Bildung: Selbstverständnis, Zukunftsperspektiven und Innovationsschwerpunkte* (pp. 191–213). W. Bertelsmann Verlag.
- Thole, C. (2020). ET2020: Vocational identity development as remaining major challenge. *bwp@-online*, 39, 1–32. <https://www.bwpat.de/ausgabe/39/thole>
- Thole, C. (2021). *Berufliche Identitätsarbeit als Bildungsauftrag der Berufsschule – am Beispiel der dualen Ausbildung im Einzelhandel [Vocational identity work as VET school's mandate of Bildung – using the example of dual track apprenticeship in the retail sector]*, wbv. <https://doi.org/10.3278/6004730w>
- Thole, C. (2023a). Theme-centered interaction and developmental tasks as research method and pedagogical tool regarding identity development in VET. *Frontiers in Psychology*, 14, <https://doi.org/10.3389/fpsyg.2023.1201305>
- Thole, C. (2023b). Grenzen einer arbeits- und geschäftsprozessorientierten Berufsbildungsdidaktik vor dem Hintergrund der Veränderungen in der Arbeitswelt: Skizze einer Berufsbildungsdidaktik 4.0 [Limitations of work and business process-based VET didactics against the background of transformations in the world of work]. *bwp@-online*, 45, 1–36. https://www.bwpat.de/ausgabe45/thole_bwpat45.pdf
- Tramm, T. (1994). Die Überwindung des Dualismus von Denken und Handeln als Leitidee einer handlungsorientierten Didaktik [The overcoming of the dualism of thinking and action as guiding principle of action-oriented didactics]. *Wirtschaft und Erziehung*, 46, 39–48.
- Tramm, T., Hofmeister, W., & Derner, M. (2009). *Evanet EH Evaluation des Innovationsnetzwerkes Einzelhandel in Hamburg: Abschlussbericht zum 11.09.2009. [Evanet EH evaluation of the innovation network retail in Hamburg: Final report dated September 11, 2009]*. Universität Hamburg, Institut für Berufs- und Wirtschaftspädagogik. <https://www.ew.uni-hamburg.de/ueber-die-fakultaet/personen/tramm/files/evanetabschlussbericht.pdf>
- Tramm, T., Kremer, H., & Tenberg, R. (2011). Lernfeldansatz – 15 Jahre danach [The learning field approach – 15 years later]. Editorial. *bwp@-online*, 20, 1–4. http://www.bwpat.de/ausgabe20/editorial_20.pdf
- Uhly, A., & Neises, F. (2023). *Vorzeitige Vertragslösungen in der dualen Berufsausbildung: Aktuelle empirische Befunde der Berufsbildungsstatistik und Maßnahmen – Ein Überblick [Dropouts in dual track apprenticeship: Current empirical evidence of VET statistics and measures – an overview]*. BIBB. https://www.bibb.de/dokumente/pdf/dazubi_informationsbeitrag_vertragsloesungen-befunde-massnahmen-ueberblick.pdf
- Ulrich, P. (2001). Wirtschaftsbürgerkunde als Orientierung im politisch-ökonomischen Denken [Economic citizenship education as orientation in political-economic thinking]. *sowi-onlinejournal*, 2. https://www.sowi-online.de/journal/2001_2/ulrich_wirtschaftsbuergerkunde_orientierung_politisch_oekonomischen_denken.htm

- Volpert, W. (Ed.) (1980). *Beiträge zur psychologischen Handlungstheorie [Contributions to psychological action theory]*. Huber.
- Voss, G. (2001). Auf dem Weg zum Individualberuf? Zur Beruflichkeit des Arbeitskraftunternehmers [Towards the individual vocation? About the vocationalism of the manpower entrepreneur]. In T. Kurtz (Ed.), *Aspekte des Berufs in der Moderne [Aspects of the vocation in modernity]* (pp. 287–314). Leske + Budrich.
- Zabeck, J. (2004). *Berufserziehung im Zeichen der Globalisierung und des Shareholder Value [Vocational education in the age of globalization and shareholder value]*. Eusl.