# Riding the tiger: An empirical investigation of subjective courses of action in dealing with the contradictions of teaching-learning situations

### Helmut Ittner

### Abstract

Research on teaching-learning-processes at schools often focuses either on the student's performance or the teacher's personality, knowledge, competences, or proficiency. There is no overarching theory which links both sides of the process. The concrete studies often follow the idea that students' results can be produced or influenced by the teacher's pedagogical actions, and try to prove cause-effect-relations by a quantitative empirical investigation. In some of these research projects statistically confirmed results are found without contradictions to other surveys' outcomes. However, high degrees of variance remain, and findings of these studies merely highlight correlations so that it is not possible to prove unequivocally what is the cause and what the effect.

# Keywords

subjective courses of action, contradictions, teaching-learning

Using Holzkamp's Kritische Psychologie (1985) [Critical Psychology] and his learning-theory (1995), supplemented by findings of professionalism (Helsper, 2004), teaching-learning-situations can be modelled by a homogeneous theoretical concept as a metastable asymmetric arrangement between teachers and learners regarding the requirements of the participants' interpretations. Pedagogical action can thus be seen as grounded in conditions, meanings, and reasons in a zone of tension resulting from societal contradictions, the

institutionalization of education, and the antinomies of pedagogical relations concretely represented in a specific teaching-learning-situation.

Acting in these situations requires positioning<sup>1</sup> by the subjects concerning the concrete requirements, conditions, and interests and about the patterns of meanings which are available to a subject with a particular social position, biography, and personal situation. This way the empirical research must discover the particular variety and subjective reinterpretation of the social patterns of meanings to understand the grounds of a specific kind of pedagogical action. This aims as well at a contribution to a subject- science model of teaching.

This article will explicate the theoretical considerations and methodological approach. It will describe some results from empirical research on the actions of teachers at vocational schools in Germany, and it will discuss what this means for the possibility for using Kritische Psychologie for concrete research and exploring theoretical views on teaching.

# Research on teachers' grounds<sup>2</sup> for pedagogical actions

What causes teachers to act in a certain way in (institutional) teaching-learning situations? With regard to research on teachers' professional activities, it is noticeable that this question is dealt with in a specific way. Teaching or even achievement results of students are recorded as a result of pedagogical knowledge that can be operationalized or as an effect of measurable competencies or as correlating to certain personality traits (Terhart, 2011). Most of the research based on this follows a conditionality paradigm: if there is specific knowledge, competence or personality, this leads to a kind of instruction that is considered to be best for an optimal learning outcome.

This presupposes a certainty that, given the complexity of the political, administrative and institutional circumstances and in the light of constantly changing education policy objectives, the normative guidelines and didactic concepts of the last 50 years appear more than questionable (Reich, 1977). However, this also ignores the social contradictions in an educational system committed to the best possible support of each pupil as to a selection of achievements and opportunities for social participation (Berger and Kahlert,

<sup>&</sup>lt;sup>1</sup> The term 'Positionierung' has no direct equivalent in English. If in the following text 'positioning' is used, this refers to the possibility but also necessity for the subject to behave to different contradictory requirements and associated meanings.

<sup>&</sup>lt;sup>2</sup> Using the term 'grounds for action' (Handlungsgründe) refers to the explanation that Tolman (1994) gives: "Grounds for action derive from our assessments, both emotional and cognitive, of our environments and of the possibilities for action that they offer" (p. 110). Grounds are not necessarily conscious or rational.

2005, Gomolla and Radtke, 2009). And last but not least, the teachers in question are not accorded an independent and meaningful access to the circumstances, including their own resources (Knauer, 2006), and it is precisely the pupils who perceive the differences that are significant for teaching (Bohnsack, 2013); as a rule they do not encounter statistically average teachers.

Critical Psychology, with its understanding of the merits of the actions of societal subjects (Ebner von Eschenbach et al., 2014), offers an alternative approach in principle, but – although well founded in theory and based on the categorical provisions of human action under concrete societal circumstances – for a concrete version of the professional action of teachers a new trail must first be blazed (Haug, 2013). Although the book on learning (Holzkamp, 1995) provides a single-theoretical concretization which also provides important clues for the description of teaching-learning situations, the actions of teachers and their grounds related to situations with specific peculiarities are not substantiated in the principal works of Critical Psychology. Apart from a few exceptions (e.g., Ludwig and Schmidt-Wenzel, 2018; Schepers, 2014; Ludwig and Rihm, 2013; Häcker, 1999; and Rihm, 2006), there are hardly any attempts to make up for this and to use it as a basis for actual empirical work.

This article first presents the theoretical considerations used as a starting point for a study of the grounds for teachers' actions in vocational schools in Germany. Subsequently, the survey and evaluation procedures will be discussed. This is followed by a rather cursory review of the results of the evaluations, with a view ultimately to the question of what insights can be gathered overall for critical psychological research or a possible return of critical psychological research into teachers' actions. Even if the concrete work is linked to the context of school, it is finally also discussed which general conclusions can be drawn for research on pedagogical action.

### Theoretical frame of reference

With his theory of learning, Holzkamp (1995) argues that initially intentional learning should be understood independently of (institutional) teaching-learning situations. Or, formulated from the point of view of the learning subject, I use an expansive learning loop to work through the breakdowns available to me of an action situation in which a problem has emerged which seems to me to be solvable with the help of an extension of my understanding of self and world (See p. 183ff.). It is about a transformation of the meanings (see Holzkamp 1985,

pp. 230ff.), which, in the versions valid for me<sup>3</sup>, initially provide no satisfactory options for action.<sup>4</sup> Only through a changed ensemble of meanings – according to my assumption – would there be options for dealing with the problem and my ability to act would broaden.

There are many arguments to be made for calling such transformations 'education processes', provided education is understood to be a cognitive and social process of making sense of self and the world (Marotzki, 1999; Ludwig, 2016).

Defensive learning situations, on the other hand, have no relation to issues with learning arising from the learning subject's life and world, but represent a problem introduced by the exercise of power. Subsequently, this compels the subject to acquire (and often also to verify the acquisition of) prescribed meanings (in a prescribed way). A refusal of this acquisition of prescribed meanings runs the risk of losing the (relative) capacity to act (Holzkamp 1995, pp. 187ff.). A classic example is the situation in school, in which the given curriculum contents are the normative measuring stick for learning requirements, irrespective of whether the learning subjects have an interest in exploring their life-world-related actions by means of these knowledge contents.

While a concept of learning has been developed which has far-reaching consequences for the understanding of teaching-learning situations, there are few implications for acting as a teaching subject. Teaching takes place with reference to meanings in the same way any action does. These meanings are understood as social possibilities for action to which the acting subject can respond. From the point of view of the acting subject, they can attempt to secure their own relative ability to act and expand it to a generalized ability to act (Holzkamp, 1985, pp. 375ff.). However, concrete action can only partially overcome the restrictions imposed by the power relationships; one's possibilities for action are narrowed as are those of others – in the case of teaching action, those of the learners. At the same time, there is always a shared perspective with others to overcome the limitations of one's options for action as well as those of others.

Teaching-learning events are highly complex. Therefore, describing an individual, expansive learning process and identifying the hindrance to the process characterized by institutionalized disciplinary power is not sufficient, since the social aspects of the learning process are neglected, as well as the

<sup>&</sup>lt;sup>3</sup>In the following, reinterpreted meanings are used for clarification, but it can nevertheless be said that meanings are always interpretations and that the subject grasps meanings by modifying them and making them their own without being able to deny their sociality.

<sup>&</sup>lt;sup>4</sup> More precisely, it is about a change to a generalized ability to act, which goes hand in hand with an extended comprehension of the sociability of the premises of action (see Holzkamp, 1985, pp. 371f.).

ambiguity associated with every mediational issue. A course on Critical Psychology, for example, would stand in the tradition of emancipatory education and it must be possible to understand a related pedagogical act differently than merely as restrictive and as a limitation of learning opportunities (Haug, 2013). With all remaining restrictions, which cannot be eradicated even in social-critical theories, there is always the perspective of an expansion of the understanding of self and the world shared by the common general interests of the teacher and the learner.

Considering continuing education and adult education, a series of papers exists which attempt to provide a theoretical version of a model of pedagogical action based on Critical Psychology. This model is suitable for supporting expansive learning processes (Faulstich and Ludwig, 2008; an overview can be found in Faulstich, 2014). It can be used as a starting point for appropriate considerations for the school, for which there are almost no comparable efforts (Hackl, 2008; Rihm, 2011).

A prerequisite for cooperative teaching-learning processes is, therefore, an understanding of the learning interests of the learners by the teachers and the offering of alternative horizons of meaning, which are suitable to support the learners in their efforts to extend their meaning horizons (Ludwig, 2008, p 50ff.). References of learners and teachers to the objective or social side of the teaching-learning situation (which also includes the operational aspects of learning) are in each case different as a result of different life situations, positions, and biographies (which is just one reason to learn in teaching-learning situations). Nevertheless, it can also succeed in identifying similarities in these references from which the offering can be made. Teachers and students have to understand each other at least partly in terms of learning interests and possible developmental offerings; otherwise, the difference becomes insurmountable, whatever happens. The prerequisite is recognition or appreciation of concerns, intentions, and reinterpreted meanings relating to one's life world (Ludwig, 2000, pp. 213ff.; see also Honneth, 1992).

For the school, this understanding needs to be broadened to give an idea of the specific structural specificity of this institution. Here one can refer to structural, theoretical work (Oevermann, 1996; Helsper, 2004, 2008), in which there are contradictory requirements in teaching-learning situations (specifically antinomies), which are not resolved by the teachers into one pole but in each pedagogical relationship action is characterized by one pole or the other (see Helsper, 2004, pp. 61f.). However, the limitations of the current state (school as a disciplinary institution – Foucault, 1976, 2004) and future participation (by means of selection) and their mechanisms are also to be taken into account.

Thus, a constellation can be assumed in which teachers ground their actions by relying on knowledge or their competences in a manner influenced by their biographies and their conditions and positions as well as the historical-social situation (Günther and Ludwig, 2014), such that a meaningful action that is appropriate to the situational, contradictory requirements becomes possible. Of empirical interest is the way in which this happens, which societal interpretive structures are used and whether, and to what extent there are potentials for recognition, appreciation and mutual understanding in the context of grounds and meaningfulness<sup>5</sup>,.

### Methods

Regarding the methodology, meaning-grounds analyses have been used in the research process which this article is based on (Ittner, 2017). For this purpose, adequate survey and evaluation methods were developed for the object of the study by ascertaining the level of subject-scientific methodology, and checking that it was suitable for the project. In particular, there was a lack of precise descriptions of evaluation methods for research based on Critical Psychology. At the same time, the impression emerged that certain premises for meaning-grounds analyses had to be questioned (Ittner, 2016).

In the final analysis, experimental procedures were based on research from the standpoint of the subject. The research from the standpoint of the subject reported elsewhere (e.g., Markard, 2010) suggests that this point of view can be achieved in a research process that is minimally influenced by the interests and respective standpoints of the researchers. Although the standpoint of the subjects to which research is directed must be an indispensable orientation for any subject-scientific research, it necessarily remains how far a cooperative research process may go with different standpoints. The research process will thus always be only a movement towards subjective standpoints. A generalized subject standpoint is unavailable because of the involvement of all in the contradictoriness and thus partial unavailability of social structures of meaning (Holzkamp, 1985); instead, only approximations are possible.

<sup>&</sup>lt;sup>5</sup>. If we speak here of meaning-grounds relationships, then their connection with the conditions interpreted as premises is also taken into consideration, but in the end, they also open up to the subject through meanings.

# **Investigated Cases**

Case studies and reflections resulting from a research project on the use of elements of a quality management system to support student learning processes were used as empirical material (Ittner and Zurwehme, 2014). In a continuing education research setting, teachers were asked to reflect on their own actions with the help of casework (Müller, 2003) in a small group of colleagues. The results of a first evaluation of the statements by the researchers were offered in a second meeting for a deeper reflection on the cases. The transcribed records of the two meetings form the empirical material for the research described here (Ittner, 2017). From the available resources, the records were used which provided the descriptions and explanations of the teachers; moreover, only cases were evaluated in which the teachers also participated in the second meeting. Thus, a total of 11 cases could be evaluated.

The participants were teachers from five different vocational in Germany. They answered question about the classroom situation in the classes of part-time vocational schools in which the teachers experienced atmospheres of irritation, action problems, or indistinct negative vibes.

# **Evaluation procedures**

The meaning-grounds analyses developed in the evaluation process refer to methods and principles of the documentary method (Bohnsack, 2003, 2013; Nohl, 2013) as well as situation analysis (Clarke & Keller, 2012). Because of the of the reinterpreted meanings, a principle intersubjective comprehensibility can (also) be assumed that is the precondition for the reconstruction of the meaningfulness of the action of the respective subjects. At the same time, there is always a lack of understanding because of the particular biographies or the differences in the circumstances and positions of the subjects involved. Moreover, the acting subjects are only partially aware of meaninggrounds relationships; therefore reconstructions are always limited in scope (Ittner, 2016).

The primary objective of empirical reconstruction is positioning. Positioning in this context is defined as thematically delimited meaning-grounds relationships in the context of demand structures that are contradictory in themselves or that present themselves as unresolvable tensions. In contrast to situational meaning-grounds relationships, positioning is taken as situation-overlapping meaning-constitutions. It represents possibilities to meet specific (subjectively perceived) conditions of the demand structure in such a way that

one's own actions can be consistently founded. By means of the thematic mapping, positioning of different subjects can be compared.

Regardless of the difficulties in differentiating from other uses of terms (especially in the context of business models), *positioning* is used for three reasons: It expresses the intentionality of the subjects, it points towards the necessity of finding or rejecting specific societal opportunities for action, and it refers to certain societal structures of meaning (a similar definition of terms can be found in Melter, 2006, p. 287ff.).

In the process of reconstruction, it is first of all necessary to grasp the meaningfulness of the arguments cited by the respondents; this roughly corresponds to the step of formulating interpretation in the documentary method (e.g., Bohnsack, 2013. pp. 15ff). In a first comparative analysis, thematic aspects are then worked out, which show significance regarding the argumentation. The topics of the arguments are assigned to the statements, and their content is compared and evaluated with regard to validations (argumentative) grounds and explanations; this corresponds approximately to the sort of location-differentiated analysis as well as the reflective interpretation of the documentary method (see above). However, the key question is not how the statements are constructed, but rather what choice is made from a possible (and conceivable) range of appraisals, grounds, and explanations.

Still thematically related, but abstractly conceptualized, this results in a first version of the positioning. The different references to the statements and the positioning must be taken into account. While the former should refer to the survey situation and serve as explanations, justifications or evaluations of the former action in respect to a former action situation in the sociological context of the survey in the positioning, those meaning-grounds-connections can be found that came into play in the action situation itself; But this can only succeed if all positioning is situation-overlapping.

The point of view of the researcher flows into this, as for example with the question of possibilities that are conceivable beyond the range that becomes visible in the empirical material – possibly in the form of a reference to a theory – and does not leave the result of the interpretation process uninfluenced. Therefore, it is indispensable to identify the introduced theoretical models and the points of view of the researchers. In the project already mentioned above as a combination of research and further training, the researchers provided structure and theory to the participants, which appeared to be helpful in a first analysis of the case histories. In the reflection phase, the participants had the opportunity to take this up and to use it in their own ways, which seemed to them to open up their own experience.

In the further evaluation procedure, a systematization of the positioning takes place via categories, so that they can be presented as a structured spectrum. A validation of this spectrum is carried out successively by a retrospective application to the interpretations of the cases processed in the first step. The spectrum thus obtained can be understood as a concretized possibility space of meaning structures and meanings-grounds contexts, which can be attributed to the object of research – in this case, the constitutive meaning of educational action by teachers of vocational schools. Teachers of vocational schools typically refer to it as illustrated meaning structures. At the same time, the spectrum makes it possible to gain insights into the structural conditions of the subject of research – in this case, for example, concerning those power structures that are inscribed in vocational schools and discourage current and future participation of students.

In the validation by reference of the gained categories to the individual cases, the positionings in the interpretations of individual cases are exposed at the same time by recognizing for the individual case characteristic meaning-grounds relationships as thematically accentuated concretisations of the categories. The positioning that has become relevant in individual cases is different from another possible positioning. This provides a basis for deriving meaning-grounds patterns. These can be understood as a plausible sense-making background of the action and at the same time illustrates in their differentiated representation of the (comprehensible) overall structure of the positioning the peculiarities of the respective situational pattern.

### **Results**

According to the methodological considerations, results occur on two levels: Firstly, on a cross-case level and secondly, a spectrum of positioning possibilities gradually emerges. As a result, there is a continual expansion, and concomitant compression to apply the already determined positioning possibilities and the resulting abstractly derived categories to the individual empirical evaluations.

In the spectrum, the situation overlapping possibilities and limitations of the focused field of action (for the study presented here: teaching at part-time vocational schools) are represented as they represent themselves for the actors. Thus, similarities and differences are manifested, and it is possible to formulate provisional hypotheses on sense-making features of the field as empirically detectable options.

<sup>&</sup>lt;sup>6</sup>This corresponds to the premises as formulated by Holzkamp, 1995, and Markard, (2014), respectively.

At the same time, the evaluations of the case descriptions on meaning-grounds patterns can be specified (on a case-by-case basis). These patterns should *not* be understood as descriptions of features or characteristics of acting people. On the one hand, because they are bound to concrete action situations, and on the other hand, because the subjects always have the opportunity to act substantially differently in comparable situations.

The categories of the spectrum of positioning possibilities show a wide range of aspects of the meaning composition, as they act as grounds for pedagogical actions at vocational schools. For example, there are categories such as 'Producibility of Exam Success,' 'Success restraining Characteristics of Students,' 'Social Class Community' or 'Performance Evaluation.' Particularly noteworthy, however, are categories assigned to either the upper category "power relation" or the upper category "pedagogical relationship" and play a dominant role overall across all meaning-grounds patterns. However, these categories also show that they are essential for the differences in the grounds of the patterns of individual cases.

As already mentioned, there is always the possibility of introducing a theoretical model into the underlying evaluation method if it serves to break down the obtained results further or to condense these into essential features. For the latter, the conceptual understanding of 'power of interpretation' according to Stoellger (2014) and of 'instrumental relationships' according to Holzkamp (1985) were used. In an application of these considerations to the determined results of the analysis of the positioning possibilities, two theoretical building blocks were revealed as essential dimensions of an understanding development: the bundle of characteristics called 'power of interpretation' and that of the 'instrumental pedagogical relationship'.

The *power of interpretation* is understood as the ability or intention to enforce structures of meaning in relation to the objective teaching-learning subject or the socio-operative teaching-learning situation as a valid interpretation relative to other possible interpretations. In the patterns analyzed, there are differences with respect to the question of which validity claim these interpretations support: starting with an absolute claim aimed at enforcing the interpretation in any case, through a variant that accepts the limited possibilities of enforcing this interpretation, to a variant that allows others (the students) situationally valid interpretations.

Instrumental pedagogical relationships involve the absence of an interestbased reference on the part of either the teacher or the learner to a teachinglearning subject. Instead, the pedagogical relationships are constituted by the unspecific aspects of an interpersonal co-existence in the consciousness that this

can always be connected with an assertion of one's interests against those of others and thus with a constant latent mutual mistrust.

The evaluated material showed three different forms of interpretive power and also three manifestations of the instrumental pedagogical relationship, of which seven variants are composed, as shown in Table 1.

Forms of the Power	Power of	Acceptance of the	Acceptance of the
of	interpretation as	fragility of	legitimacy of
	absolute	interpretive power	questioning
			interpretive power
Interpretation			
·			
Forms of the			
instrumental			
educational			
relationship			
Structural imprint of			
educational relations	Variant 1a	Variant 2a	Variant 3a
non-specific, general-			
human character of	Variant 1b	Variant 2b	Variant 3b
educational	Variant 15	Variant 20	variant 55
relationships			
Shaping pedagogical			
relationships through			
instrumental	7		
relationships of the	Variant 1c <sup>7</sup>		
teacher to external			
ones			

Table 1: Variants as forms of interpretive power and instrumental pedagogical relationships

<sup>&</sup>lt;sup>7</sup> Variants 2c and 3c do not occur in the empirical material. The special constellation of variant 1c, however, also results from the combination of the power of interpretation as an absolute claim and the view of a supposed need to make the pedagogical relationships dependent on relationships with external parties. However, whether a variant 2c or 3c could become empirically recognizable must remain an open question.

If the power of interpretation is seen as an absolute requirement for one's professional ability, then in practice a constant effort is made to (re) establish the applicability of the interpretations introduced by the teacher in the face of insufficient acceptance by the students. In variant 1a, this lack of acceptance is seen as structurally (for example, by the school system or the concrete institution) conditioned in variant 1b as being due to general-human shortcomings (for example laziness). In variant 1c, the absolute claim against students also applies, but it assumes a necessary adaptation of the interpretations to the patterns of meaning of those who are outside the immediate teaching-learning relationship (such as school management, colleagues, training companies, etc.). A lack of openness accompanies all three variants to divergent interpretations by the students.

In variants 2, on the other hand, the power of interpretation is seen as fundamentally fragile, without - as in variants 3 - the students being granted a legitimate claim to the validity of their own interpretations.

Specifically, the power of interpretation refers to contentual, social or operational aspects of the teaching-learning situation. It may happen that, for example, with regard to operational aspects, the students are granted the legitimate introduction of their own meaning patterns, but at the same time they are denied access to content or social aspects.

The pedagogical relationships are in principle instrumental, as there are at best selective references to the teaching-learning subject, and a cooperative extension of the breakdown of topics is the exception. The rule, on the other hand, for both teachers and students, is distanced-pragmatic efforts to meet the requirements of action formally. For students, this tends to be associated with defensive (as opposed to expansive) learning<sup>8</sup>, while teachers tend to have a restrictive (as opposed to a generalized) ability to act<sup>9</sup> (Handlungsfähigkeit). Concrete conclusions about possible relationships, for example between a restrictive ability to act of teachers and defensive learning, cannot, however, be derived from the empirical investigation.

In the sense-making grounds patterns, in part, just one of the variants is shown; in some cases, however, a change of the variants is also visible. That means that these patterns represent less the positionings or the meaning-grounds patterns' static properties of the teachers than the fluctuating efforts to cope with concrete dynamic action situations.

However, the patterns also reveal a structural condition of a field of action in a respective situation-specific concretization. This is characterized through contradictory requirements, a struggle to assert the validity of one's own patterns

<sup>&</sup>lt;sup>8</sup>See Holzkamp 1995, S. 177ff.

<sup>&</sup>lt;sup>9</sup>See Holzkamp 1985, S. 356ff.

of meaning by the teacher against lack of acceptance on the part of the students, and by negative sensitivities and the knowledge of the non-cooperative action of others in instrumental relationships. This leads to arrangements between teachers and students, which are also asymmetric because a shift from the power of interpretation to explicit exercise of power is legitimized only for teachers. At the same time, they are metastable, because the contradictory nature of the requirements but also the arbitrariness, linked to the non-cooperative references to teaching-learning objects, are always accompanied by the fact that interests and concerns are not taken into account.

Teachers, but also students, fit into the presumed circumstances of the school and try to get along and get on well with each other. As long as the social happenings in school remain reasonably within the framework of expectations and learning, with appropriate effort, can proceed defensively with what is presented by the teachers as content, all too often students are satisfied. They do not worry that their interests and concerns in the subject matter are as little met as with offerings that encourage learning of an extended understanding of oneself and the world. This is more likely than the achievability of attainable school graduation (or training certificate) that at least partially meets one' expectations. Teachers are too often satisfied with this, as long as it is possible to live up to the image of a well-ordered lesson, and that in performance assessments replicating the prescribed teaching material on a class scale is reasonably satisfactory. The arrangements are threatened, for example, by resistance on the part of the students to what they consider to be unreasonable social events, disappointments that give way in the absence of opportunities to participate or frustrations in the face of unsustainable defensive learning of requirements. Lack of (temporal and organizational) opportunities to turn to individual students, curriculum requirements, which are unrealistic from the point of view of teachers, and cannot be made relevant to the lives of students in their diversity and ability are all frustrating to teachers.

Thus the action of the teachers is like trying to restrain the recalcitrance of situational circumstances at least, even if taming is not possible; it is like riding a tiger.

The power of interpretation is always linked to a restrictive expression of the ability to act (Handlungsfähigkeit). The limitations of social participation and the limits of possibilities for development contained in the meanings congeal over the factual validity claim. The acting teacher harms himself and others by rejecting a questioning of social meaning structures. The fragility of acceptance (as it accumulates in about three cases to a massive denial of learning on the part of individual students or open opposition to the power of the teacher) is experienced in combination with negative sensitivities and the desire to see the

escalated situation get back into control again. Possibly, the teacher tries to discipline the disturbing student by (explicit) institutional exercise of power. To the extent that one fails to see through the social restrictions of participation involved in the meanings, the teacher ascribes himself and his individual actions to a refusal of acceptance. Discourses about the competence or knowledge of teachers in connection with a model-based producibility of desired teachinglearning situations or learning outcomes favor as societal sense-making structures persistence in the tendency to the restrictive ability to (Handlungsfähigkeit): If the teachers were competent and had a sufficient pedagogical, technical or methodical knowledge, they would encounter acceptance among the students for their power of interpretation. Only a reference to individual inadequacies of the pupils can then save the teacher from such a meaningful failure as a teacher. 10

As well as the somewhat restrictive ability to act (Handlungsfähigkeit) of teachers can be understood that it is just as difficult to understand a determination of a generalized ability to act. A tendency to do so can only come with common general interests of the teacher and students. In a pedagogical context, these can only relate to an extended development of teaching-learning objects and the associated meaning structures concerning the associated restrictions of participation, mystifications or reductions. Here, then, it can come to fruition, as described by Rihm (2011), with initiative and resonance. Thematically, the concrete school-based teaching-learning situation itself or a technical subject matter can become an issue, in which, for students and the teacher, evidence of other ways of social participation become apparent (as an example a debate about culturally or religiously shaped worldviews could come into question). However, any questioning can only come from the point of view of the subject, so that a joint effort to penetrate the restricted meaning structures is only possible if the teacher has at least situational and subject-related authorization of the pupils to reject the validity of the teacher's interpretations.

For the evaluated meaning-grounds patterns, an inherent plausibility was sought with regard to the suitability of the patterns of meaning for specific metastable asymmetric arrangements, i.e., the question of their functionality was raised. This also served to validate the identified patterns, whereby certain inconsistencies, such that an in-principle functionality could by no means be precluded. In addition, it was asked whether there were starting points for understanding or appreciation of students' contributions in the patterns and whether there are potentials for a revision of the pattern. Examples of such

<sup>&</sup>lt;sup>10</sup> If teachers refuse an inclusive school that will do justice to each pupil, but at the same time meet the requirements for selection and opportunity allocation, then this becomes all too understandable against this background.

patterns are an "explanatory-paternalistic course-keeping" (Ittner, 2017, p. 232ff.) with the variant 1a (absolute claim on interpretation and structural characterization of the relations), a "restrictively narrow-minded balancing" (p. 227ff.) with a change between the variants 1b (absolute power of interpretation and general-human relations) and 2a (acceptance of the fragility and structural character of the relations) or a "directive-personalizing practice" (p. 199ff.) with the variant 1b (absolute claim on interpretation and the general-human character of relations).

Particularly in the case of the patterns in which variants 1 dominate (absolute claim to interpretation), but in part also when variants 2 (acceptance of fragility) predominate, there is no or only a limited potential for a revision within the survey setting. This is different from the patterns in which the variant 3 (legitimacy of a questioning) occurs; there it comes to acting out of alternative meaning-grounds contexts within the framework of the meeting reflections. The same applies to the question of potential for understanding the concerns and interests of the students. Following theoretical modeling, the understanding potential, depending on the nature of the view of the instrumental pedagogical relationship, is more likely to be structural (variant a) than human (variant b).

In part, the patterns of variants b show references to a view of the sociability of institutional restrictions. However, the example of a sample with variant 3b also makes it clear that a fundamental concession to a relativity of the validity of the teacher's interpretations by students does not necessarily have to be linked to meanings that refer to this sociability: This pattern ("opening-controlling maneuvering" - p. 213ff.) is also functional without this reference being required. This makes it clear once again that the patterns cannot be understood as descriptions of a property of the pertinent teacher: A statement whether a pattern of meaning is in principle available to the teacher that contains such a reference is not possible; it does not occur in the analyzed material.

In this way, only a few cursory results are to be presented, which can be derived from the analysed patterns. Visible are the possibilities that such an analysis brings with it; But also the restrictions become clear. This will be taken up below.<sup>11</sup>

### Discussion

More crucial than the question of how far the interests of the researcher determine the research process is that it should be the aim of research on the

<sup>&</sup>lt;sup>11</sup>A detailed description of the range of positioning options and the established meaning-grounds patterns can be found in Ittner, 2017.

subject's point of view to generate knowledge that is not knowledge of control but developmental knowledge. Control knowledge presents facts as alleged average relationships, is based on norms or normality, and serves to change conditions from an external point of view (structural) in such a way that it leads to a desired behavior of individuals. In contrast, developmental knowledge provides an overview of possible interpretive horizons in which connections of grounds with meanings or premises are revealed. Such a knowledge can be used by a subject to question one's actions, by contrasting and broadening or deepening one's meaning-grounds relationships with the possibilities offered. A consequent change of perspectives lies exclusively in the hands of the subject and his/her biography.

In particular, research from the standpoint of the subject should focus on determining the variety of possible meaning-grounds relationships, with reference to specific action situations in a defined realm of action and their differentiation with regard to possibilities and grounds based on meanings. In the research process, therefore, it is necessary to try to move from the external point of view with an objective research interest to the standpoint of the subjects involved. This can only succeed if the research process is designed to generate developmental knowledge, since this - if appropriate - is suitable for serving the interests of the participants in the results of the research process, assuming that these results lend themselves to making possible for participants a broadening of the understanding of the Research topic. In turn, a transparency of the position of the researchers is necessary to enable the participants to classify the interpretations offered by the researchers; otherwise, there is an increased risk that the research process and research results will be subordinated to the researchers' power of interpretation.

However, a further and therefore desirable participation of the teachers on the basis of finally evaluated results could not be done in the present research, as more than two years elapsed between the data collection and conducting the evaluations. The resulting limitations must be considered when interpreting the results.

It is also necessary to question the dependency of the results on the focus on practical problems in the data collection. The research setting in the training framework was chosen, on the one hand, because it was expected that the participants would show an interest in an extended analysis of the meaningfulness of their pedagogical activities. On the other hand, there was the expectation that due to the lack of clarity and uncertainties of the teaching-learning situation, there would be indications of positioning in the form of arguments, evaluations or explanations. Both expectations proved to be realistic

in the survey process or the evaluation procedures, in so far as the participants (albeit to varying degrees) referred to the interim evaluations and used them for extended reflection of the described cases, or expressions with the hoped-for characteristics were found in the material.

It can now be argued that when one focuses on action problems, different positionings come into play rather than (from the point of view of the teacher) teaching actions occurring unproblematically. This can be countered by the fact that due to the conflicting requirements (but also the antinomies of educational action) pedagogical teaching-learning situations are basically latently problematic and the positionings that are suitable to ensure a temporarily stable handling of these constellations manifest themselves in routines in which the problems and the positionings are no longer explicit (see also van Manen, 2008). Situations in which there are problems of action on the part of the teachers would be understood as those in which existing problems would become explicit, and subsequent references to related positionings could also be made explicit.

If the term positioning is used in the method of meaning-grounds analysis as presented here, then this use of the term may seem ambiguous; however, regardless of what might be a more appropriate term, it must be clarified for subject-scientific empirical work how one deals with the situation-boundedness of meaning-grounds relationships. This becomes a problem whenever the survey situation is not parallel to the action situation, when it comes to comparisons with the goal of generalization, or if processes such as learning or education are to be understood longitudinally. For these cases, it is necessary to determine the links between meanings and the preferred grounds for action (positionings); these are, however, meaning-grounds contexts specified in terms of thematic aspects and situation overlapping relevance, and this should also be reflected conceptually.

One of the shortcomings of the approach presented here is that it does not reveal how the differences in the meaning-grounds patterns relate to the biographies or the concrete life circumstances and positions of the participants. For this purpose, supplementary thematization of biography would be necessary; whether the framework of collegial casework is suitable or whether additional biographical interviews are appropriate would have to be determined. It should, however, be borne in mind that there may be at least potentially a common interest in the institution-related case-working group with regard to overcoming the problems arising from institution-specific teaching-learning situations, and in whether partial common interests with the researchers are possible with regard to further development of situations through theoretical models or theory-based

feedback. This becomes less likely when it comes to interests that are aimed at an extended development of individual biographies or life-situations. 12

Returning to the question of the appropriateness and possible yield of the empirical procedure presented here for analysis of grounds for pedagogical action, it has been shown that meaning-grounds analyses serve to generate a developmental knowledge. This may serve to enrich the processes of reflection on one's own pedagogical action with alternative horizons of meaning. However, further studies are needed in order to clarify and expand the range of positioning possibilities, and in order to strengthen the identified theoretical components of 'power of interpretation' and 'instrumental pedagogical relationship'. Further investigations would also allow for the development of an extended pool of possible meaning-grounds-patterns to offer as options. In the context of such studies, previously obtained results could then be incorporated into the research process, thus providing the participants with a much more in-depth offer with regard to the development of their own strategies for problem areas.

In principle, there is nothing to argue against the transferability of the gained theoretical components to teaching-learning situations, for example in adult education, if there are comparable constellations with regard to institutional involvement and participation (direct or indirect type, such as in arranged qualification measures). The extent to which the theoretical building blocks 'power of interpretation' and 'instrumental pedagogical relationship' would also have analytical value as viable key categories in other teaching-learning situations should be clarified through further empirical work.

It should be clear that a subject-scientific theory of teaching can by no means be deduced from the present findings. Not for nothing do we speak of theoretical building blocks. In particular, it would be necessary to review the validity of these building blocks and to identify others (such as the aspect of the dynamics of interactions between all participants in the teaching-learning situation, or the question of the relation to actions of other teachers). This would then be embedded in a framework which, with the help of reinterpretations of non-subject-scientific theories of teaching or social interaction (as exemplified in the present work with the model of the power of interpretation), can comprehensively explain teaching actions or acting as a teacher.

<sup>&</sup>lt;sup>12</sup>In this respect, potential collective interests might be more likely, for example, if caseworking were to take place in a group of fixed-term teachers, or if trainee teachers were to come together who were considering taking up permanent employment.

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Helmut Ittner worked as a teacher at vocational schools and was responsible for quality management and evaluation. Later he researched the impact of quality management, the actions of teachers, methodological questions of qualitative social research, school culture and learning processes for the Senator for Education in Bremen and at the University of Potsdam. Today he is responsible for quality and school development at the Senator for Education in Bremen. E-mail: helmut.ittner@bildung.bremen.de