MULTIFACETED CONNECTIONS BETWEEN THEORY AND PRACTICE THROUGH A DIDACTICAL LENS – UNIVERSITY CONTINUING EDUCATION'S POTENTIAL TO IMPACT THE WORLD

Anita MÖRTH

Independent researcher, DE

Email: am@mur.at

Keywords: Theory practice distinctions, practice orientation, didactical actions, didactical

model, new knowledge production

ABSTRACT

One distinctive feature of university continuing education (UCE) is its intermediate position between theory and practice. This is concomitant with the necessity (didactical) to address these two distinct perspectives. This article presents a model of didactical actions in UCE that serves as a systematic description of such actions. The model helps to illustrate the actors and their manifold actions that are aimed at interconnecting theory and practice on multiple levels within and outside higher education institutions. It also makes it possible to discern the interconnectedness between didactical actions on different levels. By considering theory and practice as two equal perspectives, both needed for learning and for generating new knowledge, the model also allows insight into the multi-directed and mutually impacting relations between theory and practice. Based on this, this article bolsters new forms of knowledge production that acknowledge alternative places and forms of knowledge production outside universities. Similarly, the paper emphasises learning processes that involve places and logics from both theory and practice. The article contributes to the field of didactics of UCE in both a theoretical and practical regard and contributes to recognising UCE's potential to exert an impact within and outside higher education.

INTRODUCTION

The number of students enrolling in tertiary education is still on the rise and is grounded on demographic changes, new requirements of the labour market, and the academisation of professional qualifications among others (European Union, 2023). This rise in student population requires universities to increase their relevance for and impact on society. With regard to education, this is accompanied by a stronger interconnection of theory and practice which has become more important within the last decades. While at the same time there persist reservations against practice-orientation as something unacademic, several developments in the university sector are proof of an increased practice-orientation, such as the emergence of universities of applied sciences, dual study programmes, cooperative universities, university work-integrated learning and university work-based learning including higher and degree apprenticeships (Lave and Wenger, 1991; Billett, 2002b; Cooper, Orrell and Bowden, 2010; Baethge and Wolter, 2015; Graf, 2016; Wall, 2017; Wallin, Nokelainen and Mikkonen, 2019; Bravenboer, 2021). Akin to such forms of work-based higher education, university continuing education (UCE), as a specific part of university education, needs to

join traditional academia with situated and socially constructed knowledge from applied contexts. University continuing education has the additional task, however, of addressing theory-practice distinctions in a specific way, as learners already have prior academic and practical knowledge. These learners seek not just work preparedness, but also the opportunity to reflect and theorise upon their practical knowledge and experiences. This is why UCE, in particular, is regarded as occupying an intermediate position between theory and practice (e.g., Christmann, 2006; Walber and Jütte, 2015; Baumhauer, 2017; Schäffter, 2017; Cendon, Schulte and Mörth, 2021).

This paper, based on the author's doctoral thesis (Mörth, 2023), sets out from understanding didactical dealing with theory practice distinctions as a distinctive feature of UCE and from understanding theory and practice as two distinctive yet interdependent equal perspectives. Based on this, this paper brings to light didactical actions that address theory-practice differences with the help of a multi-level model of didactical actions. The multi-level model of didactical actions has a two-fold purpose. For one, it serves as a heuristic tool or analytical grid for identifying respective didactical actions in the author's previous theoretical and empiric research on theory-practice interlinking in UCE in Germany. For another, the model in its elaborated form is a result of the analysis, in that it systematically describes relevant actions and its actors on the respective levels. In contrast to the author's previous work, which presented a set of categories intended to serve as an analytical tool for developing and evaluating work-integrating HE programmes (Dadze-Arthur and Mörth, 2021), the paper at hand goes beyond in that it highlights actors and their didactical actions inside universities beyond the study programme itself *and* outside higher education institutions.

THEORETICAL PERSPECTIVES ON THEORY PRACTICE RELATIONS

The paper originates from a heterarchical understanding of theory and practice, as is evident in a Marxist philosophy of practice (Sánchez Vázquez, 1977), to which a number of theory strands refer, such as the Social Practice Theory of Lave and Wenger (Lave and Wenger, 1991) or various Practice Theory approaches (Schäfer, 2016). From this understanding, theory and practice are seen as two mutually dependent kinds of human activity. They are distinguishable yet equally important perspectives, shaped by their respective logics of knowledge and action, and form two parts of a whole. Accordingly, from a methodological point of view, theory can be grounded in practice; from a professional-theoretical point of view, new knowledge can emerge through reflecting, researching practitioners.

Given the importance of both theory and practice for learning processes, several learning theories employ the theory practice distinction and put learners' experiences from practical (professional) activities at the centre of learning. Three of these approaches shall be outlined below to illustrate the meaning of connecting theory and practice by considering learners' practical experiences within higher education learning processes. The approaches are relevant for the paper because they describe processual, interactive, and complex connections between action, experience, learning, knowledge production and changing the world.

The first approach, *Reflective* and *Experiential learning* (Dewey, 1916; Schön, 1983; Barnett, 1992; Cendon, 2020), sees theory and practice, respectively knowing, and acting in a processual correlation. While experience as origin of thinking is composed of acting and enduring the consequences of this acting, reflective experience is considered as intentionally reflecting upon the connection of acting and its consequence(s). Knowledge is seen as a result of thinking/reflection, which can become meaningful only when it is used in the context of experiences. This approach therefore argues that learning, i.e., educational processes, need to include acting and experiences and not theory alone. *Situated learning* (Lave and Wenger, 1991; Wenger, 1998, 2010), as a second approach, sees experience and

understanding as mutually constitutive and puts the emphasis on social and processual aspects of learning. Learning is understood as an integral part of every action and thus as a situated activity in which persons and their identities develop through a process of increasing participation in the world, and where structures and communities change through processes of negotiation about meanings. A third approach, *Workplace* and *Work-based learning*, emphasises the situatedness of learning in (professional) practice, the engagement with practice through research and reflection, the emergence of knowledge from within practice and the alteration of practice contexts as a consequence (Billett, 2002a, 2004, 2015; Boud and Solomon, 2001; Lester and Costley, 2010; Costley and Dikerdem, 2011; Boud and Rooney, 2015; Helyer, 2015).

Considering such an understanding of theory and practice as both equally relevant for (higher) learning, the analysis systematically tries to identify didactical actions that relate theory and practice for the purpose of learning processes. The underlying concept of didactical actions refers to a concept from the 1970s and means more than simply teaching (Flechsig, 1975; Flechsig and Haller, 1975). Didactical actions in this understanding comprise all systematic decisions and actions from teachers and other relevant actors that have an influence on processes of teaching and learning. "In general, didactical actions (...) are about analysing, designing, and implementing individual, collective, and institutional processes and structures that are geared towards influencing learning and teaching as well as knowledge transfer and the acquisition of knowledge" (Flechsig, 1989, p. 5, translated by author). The subsequent section presents the analytical approach that aims to identify the respective didactical actions as well as the analysis' data corpus.

RESEARCH APPROACH AND DATA CORPUS

The basis for the analysis presented in this paper is the author's previous research on theory practice connections within UCE (Mörth and Schiller, 2017; Mörth and Cendon, 2019; Mörth, 2020, 2022; Mörth, Cendon and Klages, 2020)¹. These previous research projects narrow down theory-practice interconnections within UCE from different starting points and were based on different research approaches and data that are outlined as follows:

- A grounded theory study (Strauss and Corbin, 1990; Glaser and Strauss, 1967) that
 indicates how university teachers gear their teaching strategies towards UCE
 students' comprehensive experiences and knowledge. The study was based on
 interviews with seven university teachers with vast experience in teaching within UCE
 in the German-speaking context as well as in the Netherlands and in North-America
 (Cendon, Mörth and Schiller, 2016), and an in-depth analysis of the interviews
 focusing on how the interviewed teachers view their adult, experienced students
 (Mörth and Schiller, 2017).
- A document-based case analysis (Eisenhardt, 1989) that systematically describes teachers' teaching and learning activities that address the theory-practice interconnection. The analysis followed an action research approach (Fox, Martin and Green, 2007) of nine UCE study programmes in conjunction with an in-depth analysis of three of those cases, including interviews with one student, one teacher and the programme director of each programme (Mörth et al., 2018; Mörth and Cendon, 2019).
- A participative research project that developed criteria for a German version of university work-based learning. The study was based on an action research process (Fox, Martin and Green, 2007) with persons responsible for UCE at four higher

Most of the research focused on programmes that stem from projects that were subsidised within a big national funding competition. https://www.bmbf.de/bmbf/shareddocs/bekanntmachungen/de/2011/03/625_bekanntmachung.html

- education institutions and a pilot study including thirteen UCE study programmes and a literature review (Mörth, Cendon and Klages, 2020; Mörth, Klages and Cendon, 2020).
- An in-depth case analysis that carves out the potential of practitioner research for a
 multidirectional knowledge transfer. The paper was based on one of the cases from
 the study on work-based learning criteria (Mörth, Klages and Cendon, 2020),
 supplemented with an abductive analysis (Kelle and Kluge, 2010) of qualitative
 interviews about meanings and understandings of theory and practice with one
 teacher and the person responsible for designing the study programme (Mörth,
 2022).
- An analysis of quality management in UCE in Germany that describes quality criteria relevant for theory practice interconnections and deduces quality dimensions. The results were based on an analysis of quality measures in UCE study programmes as part of an action research process with persons responsible for quality measures in UCE and a document analysis of the published documents and papers from their institutions, in addition to a literature-based analysis of relevant guidelines, recommendations and concepts for UCE and quality management specific for UCE (Mörth and Pellert, 2015; Mörth, 2020).

The research results of these studies were analysed for the purpose of identifying didactical actions geared towards theory practice interconnection. To that end, the author developed a theory-based multi-layered model of didactical actions for UCE. This model is based on existing models of didactical actions from various educational areas: didactics in general (Flechsig and Haller, 1975), didactics of UCE (Jütte, 2015), didactics of higher education (Flechsig, 1975), and didactics of continuing education (Flechsig, 1989; Schrader, 2011). All these models are predicated on a broad understanding of didactical actions as decisions and actions pointed towards teaching and learning processes. The models try to systematically describe and illustrate relevant actions and their actors. By comparing these existing models, the author arrived at a version that included levels relevant for UCE in particular. While the author's model served as an analytical grid for analysing the research results in order to highlight actors and their didactical actions that relate theory and practice in UCE, the analytical process served to elaborate and validate the model at the same time. Analysing the research results with this analytical grid confirmed the assumed levels and revealed a wealth of didactical actions and a variety of relevant actors, as outlined in the elaborated version of the model that follows.

A MODEL OF DIDACTICAL ACTIONS IN UCE

Didactical actions on multiple layers

The model of didactical actions in UCE considers levels outside the university (indicated within squares in the figure below) and the university itself (as indicated within the circles). Inside of the university comprises personal and reflective actions on the *subjective level* and levels that focus teaching and learning, that is, the *level of teaching/learning situations* and the *level of courses*, framed by the *level of UCE study programmes* and the *level of organisation*. Outside the university are the *levels of organisational environment*, *national policy*, and *supranational policy*. The following figure illustrates the levels and the identified actors. This is followed by descriptions of the levels with their respective didactical actions.

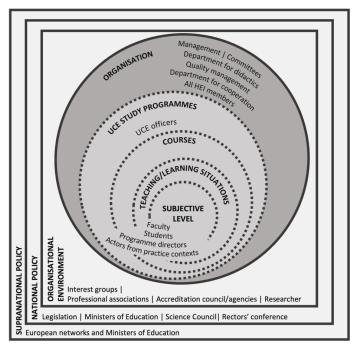


Figure 1: The multi-layered model of didactical actions with its actors

The **subjective level** comprises those didactical actions that refer to the self and to moments of self-reflection. With students and teachers as central actors, this level revolves around establishing a practice-research ethos among students and teachers. This also includes being challenged about self-concepts and basic attitudes. *Students* as practitioner researchers need to reflect on their experiences, their roles in the workplace and their professional self-concepts as part of the research process that includes acting and the possibility of taking on new roles within their practice contexts. *Teachers* are also challenged regarding their self-concepts when they are no longer exclusively and solely experts, but facilitators of research processes and learners themselves. Both groups of actors need to reflect on their self-concepts due to their multiple affiliations, especially those of practice and academia.

The **teaching/learning situations level** refers to processes of teaching, learning, and researching. Central actors on this level include actors from the higher education institution as well as those from practice contexts. *Teachers* (with their practical experience) integrate students' practice experiences into their teaching strategies and put reflection at the centre of learning activities that are geared towards connecting theory and practice. This includes research projects that take practice (problems) as a starting point and that are student-led. *Students* are central actors as they steer the research process and co-create learning processes. *Students' colleagues at the workplace* and *fellow students* are entangled in students' reflection processes and *practice coordinators* from the higher education institutions and *company supervisors* accompany students before, during and after their (research) activities within the practice context.

The **courses level** refers to the planning and implementing of courses. At this level, *teachers* are central actors in implementing competency-based teaching, a respective didactical model, and practice-relevant forms of assessment. They design the interplay between theory input and research activities as part of students' research projects. In these projects, *students* are central actors in that they generate the research question. Employer organisations or other *practice institutions* are also central, as they provide the setting for implementation of those projects. On this level, actors from practice contexts and teachers

are also planning and implementing teaching-learning activities at the university or at work/in the practice context.

The **level of UCE study programmes** concerns the designing of study programmes with programme managers, teachers, students, students' employers and other companies/organisations as central actors. The central didactical action is establishing basic cornerstones that are crucial for the design of practice-related programmes geared towards the needs of practice, or more generally, the world of work, and even more broadly, society. This includes establishing formats that are flexible in terms of time, place, and content, accreditation of prior knowledge for access and for credit transfer, learner-centredness, an adequate didactical model, practice-relevant examinations, teachers with practical experience and cooperation with companies/organisations. It also includes the consideration of the competence needs of specific fields or target groups, creating individualised study programmes based on single students' competence needs and the possibility for students to select components of the study programme according to individual learning needs (modularisation, electives, specialisation, etc.). This level also refers to integrating practice into the curriculum by means of defining practice activities as a relevant part of students' workload, designing the curriculum starting from practice problems, setting a relevant study job as an entrance requirement, creating possibilities for learning at work and organising cooperative arrangements that are prerequisites for integrating practice into the curriculum (e.g., for practitioner research).

The **organisational level** refers to those didactical actions that concern the framework conditions, regulations, structures and processes prerequisite for carrying out didactical actions at the levels of the study programmes and beyond. The central actors are university management, university committees and departments, and persons responsible for the implementation of corresponding structures and processes. In addition, all members of the higher education institution are relevant, because individual members of an organisation always play a central role in the institutionalisation of (new) rules and norms (e.g., Lowndes and Roberts, 2013). The didactical actions include establishing practice as a place for learning and implementing corresponding processes and structures, as well as related supportive processes. They also include the definition of new requirements for teachers with regard to their (practical) experience and of their new tasks and roles associated with the consideration of practice, as well as involving teachers from practice and creating opportunities for exchange and reflection for teachers. One aspect of utmost importance is establishing basic assumptions that are prerequisites for the other actions. This includes the significance of practice as a fundamental part of theory and a relevant place for learning, as well as a central starting point of learning processes. Equally crucial are the equivalence of knowledge with different origins, theory as a form of practice, complexity of practice and students as co-producers of learning processes, knowledge and quality.

The **level of organisational environment** refers to such organisations from the environment of higher educational institutions (HEIs) whose actions relate to UCE and its theory-practice relationship but have indirect influence only. Actors include the *bodies responsible for the accreditation* of programmes and institutions, *interest groups*, which shape discourse in the field and create opportunities for exchange between universities and companies, *researchers* who develop concepts for quality management and *professional associations* such as associations for UCE, who draft recommendations directed at higher education institutions but also at politics. In the data, those recommendations revolve around quality (assurance) of university continuing education, for example, and refer to the need to consider competences acquired outside of higher education, flexible study programmes, teachers from practice (DGWF, 2005, 2013) or to the necessary systematisation of UCE study programmes to better communicate them within the fields of practice (DGWF, 2010, 2018). Finally, *companies* and *representatives of practice* are central actors on the level of organisational environment. Their didactical actions are described on the respective levels.

The **national policy level** includes legislation, accreditation rules, recommendations from educational policy stakeholders and grant funding. Ideally, didactical actions on the national educational policy level are connected to actions on the supranational policy level and translated into national regulations. *Legislature* is a central actor when creating conditions by defining if and how references to practice are possible and creating (financial) incentives for the implementation of certain specifications. Other specific German actors are the *Standing Conference of the Ministers of Education and Cultural Affairs of the Länder* (Kultusministerkonferenz), which formulates (so far rather unspecific) regulations on accreditation for UCE study programmes, the *German Science and Humanities Council* (Wissenschaftsrat) an advisory body for formulating education policy recommendations to politicians and the *German Rectors' Conference* (Hochschulrektorenkonferenz), the representative body of public HEIs. Their didactical actions refer to laying down rules and making recommendations with regard to curricular, content-related and structural aspects of considering professional experience and practice needs within UCE.

The **level of supranational policy** refers to European educational policy recommendations regarding flexible learning paths or the accreditation of prior learning experiences, e.g., the Standards and Guidelines for Quality Assurance in the European Higher Education Area (*Standards and Guidelines for Quality Assurance in the European Higher Education Area* (*ESG*), 2015) written by *European network structures* and adopted by the *European Ministers of Education*. Such European guidelines, which can only serve national specifics to a rather limited extent, make it clear how crucial the interplay of didactical actions is across the levels. Didactical actions with reference to theory-practice connections that are addressed on this level include recommendations about student-centredness, competence orientation, flexible learning paths and the recognition of competences acquired outside higher education, among others.

Interconnections of didactical actions across levels

Considering the didactical actions across the model allows us to see and draw connections between specific didactical actions on various levels. For example, students' practical experiences as content-related and structural requirements on the study programme level refer to including learners' practical experiences in teaching on the level of teaching/learning situations. This, again, connects to establishing the workplace in formal structures as entrance requirements or as specific parts of the curriculum on the study programmes level and, on the organisation level, to establishing a general mindset that understands work as central to the learning process. At risk of such connections sounding trivial, it allows us to emphasise the interconnectedness and the necessity of actively connecting and coordinating the various didactical actions across the different levels. Such a dialogical connecting across levels or between actors on different levels has been described as a task of communication and coordination (Flechsig, 1975) that could be taken on by responsible persons for UCE. Such a "bidirectional translation service" (Kondratjuk, 2017, p. 11, translated by author) would be directed both towards the actors in the field of practice and actors in the higher education sector on the various levels. Coordinating didactical actions across levels is crucial for successfully relating theory and practice within UCE programmes.

Interconnections of theory and practice: relations with mutual impact

Looking more closely at the interconnections between HEIs and the practice context reveals that the relation between HEIs and companies/other organisations is characterised by mutual impact.

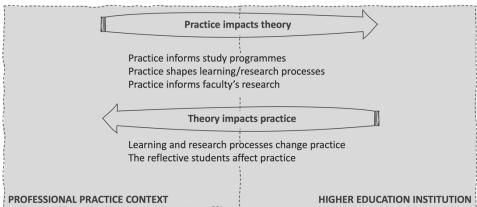


Figure 2: The mutual impact of theory practice relations

Practice informs study programmes and research and shapes learning and research processes. Representatives from the level of organisational environment – more specifically, from professional practice - take on an active role in UCE programmes in that they co-create UCE study programmes and shape learning and research processes. By doing this, they impact study programmes and UCE – its places for learning, its learning and research processes and its content – as follows. On the level of study programmes, stakeholders from practice are involved in planning and developing UCE study programmes: new programmes that will answer the needs of practice or individualised study programmes that will fulfil individual students' learning and competence needs. On this level, practice representatives are also involved by providing the professional practice context (work) as a framework and a context for conducting practice research projects and as a place for learning. On the level of courses, students' employer organisations or other practice institutions come into view as places where (practice research) projects are actually being carried out. They are also relevant actors in planning and implementing teaching-learning activities at work as a place for learning. On the level of teaching/learning situations, company supervisors accompany the students before/after/at their activities in practice, and colleagues from the workplace can be relevant actors as counterparts in processes of reflection. In this way, the practice context influences students' learning processes, which can be seen as part of theory. Moreover, students - here as representatives from practice - can inform faculty's (future) research in that they share their problems, research questions, experiences and current activities from their practice contexts, i.e., the latest industry standards.

Conversely, UCE can impact practice through research and learning activities in the practice context and through reflective students with their enhanced knowledge and professional self-conceptions. On the *level of teaching and learning activities*, students involve supervisors and colleagues in their learning and research processes and by doing so, influence the practice context. The fact that students, here as theory representatives, impact practice becomes most apparent if we focus on practitioner research: Conducting a practitioner research project can impact the organisation in two regards: (1) With regard to the actual changes that might be implemented through a project and (2) with regard to the indirect changes that might be triggered by involving other members of the organisation in the research process. The other aspect that influences practice is the reflective students themselves. In UCE programmes students are presented with many opportunities for

reflection and must challenge their (professional) self-concepts, which presumably shapes their future actions and the practice context as a consequence thereof.

As these examples show, the mutual impact between practice and university context can offer a fruitful opportunity for shared learning when theory and practice are seen as two equal kinds of knowledge that together can achieve more than one logic alone (Schäffter, 2017).

DISCUSSION. BLURRED BOUNDARIES, MULTIPLE AFFILIATIONS, CHALLENGED BELIEFS AND DEBATABLE CERTAINTIES

Placing the results within a broader context allows us to discuss them with respect to questioning existing knowledge hierarchies, to bolstering new forms of knowledge production, to expanding the definition of teachers' roles and to realising a relationship between theory and practice that can be seen as mutually enriching.

Relating theory and practice as two equal perspectives challenges prevailing beliefs about knowledge hierarchies, particularly academia's dominance over practice. Seeing practice as immanent to and necessary for learning challenges practice-distant attitudes that still often prevail within academia, especially in Germany with its strictly segregated educational fields. But this also applies to other countries, where research universities rank higher than HEIs for applied sciences, for example, An approach that sees both theory and practice as requirements for learning and generating new knowledge – as is the case when students generate new knowledge as practitioner researchers – refers to knowledge production in mode 2 (Gibbons et al., 1994), where the production of valid/accepted knowledge takes place in hybrid contexts outside universities, and beyond disciplinary boundaries. The findings reinforce debates that advocate new forms of joint, de-structured, trans-disciplinary knowledge production processes and the associated (necessary) changes in basic assumptions and beliefs (Gibbons et al., 1994; Lester and Costley, 2010; Haraway, 2016; Schäffter, 2017; Seitter, 2017). Thus, they can contribute to strengthening new, heterarchical understandings of theory and practice and new forms of knowledge production that might be needed to answer today's pressing issues.

As concerns didactics, the findings corroborate debates on shifting demands on teachers (Christmann, 2006; Cendon, 2016; Seitter, 2017). They refer to the necessity of adapting university teachers' roles from lecturing to moderating and supporting learning and research processes. This also refers to the need for teachers to have practice knowledge and/or experience as well as the need that faculty does not consist of academics only but includes teachers from practice. Boundaries become blurred when teachers do not unambiguously belong to academia: They are academics with practice experience or practitioners that are teaching at university. Likewise, students do not unambiguously belong neither to academia nor to practice: They are seen as practice experts within the university context and at the same time as academics within their practice field. If both students and teachers are characterised by their multiple memberships (Wenger, 2010), if both sides (teachers and students, HEIs and practice contexts) learn from each other (Ten Berge and Lam, 2023), and if legitimate knowledge can be created by practitioners/ in practice contexts (Gibbons et al., 1994), certain certainties and dichotomies, until now perceived as unalterable and without origin, become blurred and questionable. This paves the way for a new epistemology of practice (e.g. Schön, 1983; Raelin, 2007; Costley, Abukari and Little, 2010) and for changed and mutually enriching relations between theory and practice.

Given that more and more regular students are working while studying – some in the area of their study programme – and that professional students attend undergraduate studies for the purpose of further training, another boundary blurs, as well: That between undergraduate studies and continuing education study programmes. This suggests the possibility of

transferring processes tested in UCE to the undergraduate sector (Cendon, Schulte and Mörth, 2021) and could strengthen the role of UCE within universities and beyond.

The limitations inherent in this study include the limited reach of the model; due to the specific sample of data, most of it stems from projects subsidised within a large, national funding competition. Although the more optimal conditions due to funding may distort the results, it could also be said that this allowed for the generation of maximum performance and thus showed what may be possible and was, therefore, an ideal research sample. Future research projects could include testing the presented model and results on a broader basis and thereby eventually considering influences from other systems (Schrader, 2011) influences that are not directed at UCE but still do or may have an impact. The latter would allow UCE to recognise relevant stakeholders not yet apparent, actively engage with them and thus proactively contribute to bettering framework conditions or to proactively influencing such impact that has not yet been addressed. Another future research project could be a much longed-for neo-institutional analysis of higher education on a micro level (Cai and Mehari, 2015) or a neo-institutional analysis of the emergence of UCE as a new field, similar to Graf's work on the formation of dual study programmes (Graf, 2016). The latter could reveal the reasons and delays involved in making UCE a bigger and more relevant player in higher education and thus potentially increase its future impact.

CONCLUSION. UCE AS A CONJOINING INTERFACE THAT ENABLES MUTUAL LEARNING IN MULTIPLE PLACES

This paper introduced a model that describes didactical actions that address relating theory and practice in UCE on different levels of action. The model systematically describes didactical actions processing theory practice distinctions within *and* outside higher education institutions. In addition, the model highlights both the interactivity between actions on different levels and the interconnectedness between academia and the world of work.

The findings can be regarded as a theoretical contribution to the field of didactics of UCE but may also be of interest for the practice field. Practitioners could align their didactical actions concerning theory practice interconnections more systematically or in coordination with actions on other levels while also factoring in the actions from other stakeholders in order to reach their targets more successfully. Considering the relevance of the different levels and actors might also help establish UCE systematically and more broadly within higher education institutions.

The model also carves out the mutual positive impact of theory and practice. Implementing UCE study programmes reveals this impact in several regards, such as changes in practice induced by research projects and the students/reflective practitioners themselves or changes at the higher education institution induced by input from and collaboration with practice. Based on this, UCE enables manifold impact directed at the world of work/society and at higher education institutions. Acknowledging the mutual contributions of universities and the practice to knowledge production might help respond to the challenges society is facing today. Such a relevant role of UCE in knowledge production inside and outside universities might bolster the position of UCE as relevant part of higher education.

University continuing education and the processing of theory practice distinctions can be viewed in a hybrid space (Bhabha, 1994), where both perspectives can be related to a new one (Cramer and Schneider, 2020; Walber and Meyer, 2020; Klages and Mörth, 2023). From this position, with work consistently being a part of UCE study programmes, UCE can act as a hub that connects various actors in complex learning situations. This relates to new forms of knowledge production and to new forms of communication and collaboration as part of a learning process on both sides (teachers and students / university and practice). In this way,

new connections emerge with the world of work. With all these opportunities and chances, UCE can contribute to new ways of university teaching and learning, to new ways of producing knowledge, to changing the world (of work) and to addressing society's most pressing current issues.

REFERENCES

Baethge, M. and Wolter, A. (2015) 'The German skill formation model in transition: From dual system of VET to higher education?', Journal for Labour Market Research, 48(2), pp. 97–112. https://doi.org/10.1007/s12651-015-0181-x

Barnett, R. (1992) 'Improving higher education'. Buckingham: Society for Research into Higher Education & Open University Press.

Baumhauer, M. (2017) 'Berufsbezug und Wissenschaftsorientierung: Grundzüge einer Didaktik wissenschaftlich reflektierter (Berufs-)Praxis im Kontext der Hochschulweiterbildung'. Detmold: Eusl.

Bhabha, H.K. (1994) 'The location of culture'. London: Routledge.

Billett, S. (2002a) 'Critiquing workplace learning discourses: Participation and continuity at work', Studies in the Education of Adults, 34(1), pp. 56–67. https://doi.org/10.1080/02660830.2002.11661461

Billett, S. (2002b) 'Workplace Pedagogic Practices: Co–participation and Learning', British Journal of Educational Studies, 50(4), pp. 457–481. https://doi.org/10.1111/1467-8527.t01-2-00214

Billett, S. (2004) 'Workplace participatory practices: Conceptualising workplaces as learning environments', Journal of Workplace Learning, 16(6), pp. 312–324. https://doi.org/10.1108/13665620410550295

Billett, S. (2015) 'The practices of using and integrating practice-based learning in higher education. Jostling Cultures', in Kennedy, M. et al. (eds.) Practice-based learning in higher education. Dordrecht: Springer (Professional and Practice-based Learning), pp. 15–30.

Boud, D. and Rooney, D. (2015) 'What can higher education learn from the workplace?', in Dailey-Hebert, A. and Dennis, K.S. (eds.) Transformative Perspectives and Processes in Higher Education. Cham: Springer, pp. 195–209.

Boud, D. and Solomon, N. (eds.) (2001) 'Work-based learning: A new higher education?' Reprint, Philadelphia, PA: Society for Research into Higher Education & Open University Press, 2003.

Bravenboer, D. (2021) 'The State of Play with Apprenticeships – a 2022 Update, Work and Learning'. Available at: https://www.workandlearningnetwork.org/prof-darryll-bravenboer-apprenticeships (Accessed: 23 October 2023).

Cai, Y. and Mehari, Y. (2015) 'The Use of Institutional Theory in Higher Education Research', in Huisman, J. and Tight, M. (eds.) Theory and Method in Higher Education Research. Emerald Group Publishing Limited, pp. 1–25.

Cendon, E. (2016) 'Lehrende und ihre Rollen. Theoretische Zugänge', in Cendon, E., Mörth, A. and Pellert, A. (eds.) Theorie und Praxis verzahnen. Lebenslanges Lernen an Hochschulen. Münster: Waxmann, pp. 185–200. https://doi.org/10.25656/01:14544

Cendon, E. (2020) 'From reflective practice to critical thinking: The reflective practitioner in higher education', in Nuninger, W. and Châtelet, J.-M. (eds.) Handbook of research on operational quality assurance in higher education for life-long learning. Hershey, PA: IGI Global, pp. 189–211.

Cendon, E., Mörth, A. and Schiller, E. (2016) 'Rollen von Lehrenden. Empirische Befunde', in Cendon, E., Mörth, A. and Pellert, A. (eds.) Theorie und Praxis verzahnen. Lebenslanges Lernen an Hochschulen. Münster: Waxmann, pp. 185–200. https://doi.org/10.25656/01:14544

Cendon, E., Schulte, D. and Mörth, A. (2021) 'University continuing education as an innovation lab for future education – potentials and limitations', European Journal of University Lifelong Learning, 5(1), pp. 15–25. https://doi.org/10.53807/0501asxt

Christmann, B. (2006) "Dazwischen". Intermediäre Institutionen und ihre Bedeutung für die wissenschaftliche Weiterbildung', in Faulstich, P. (ed.) Öffentliche Wissenschaft. Neue Perspektiven der Vermittlung in der wissenschaftlichen Weiterbildung. Bielefeld: transcript, pp. 119–136. https://doi.org/10.14361/9783839404553-007

Cooper, L., Orrell, J. and Bowden, M. (2010) 'Work integrated learning: a guide to effective practice'. New York, NY: Routledge.

Costley, C., Abukari, A. and Little, B. (2010) 'Literature review of work based learning: October 2008.' London: Middlesex University. Available at: https://repository.mdx.ac.uk/item/84qq6 (Accessed: 23 October 2023).

Costley, C. and Dikerdem, M. (2011) 'Work based learning pedagogies and academic development. Project report'. London: Middlesex University. Available at: https://repository.mdx.ac.uk/item/839v7 (Accessed: 23 October 2023).

Cramer, C. and Schneider, J. (2020) 'Relationierung von Theorie und Praxis: Was bedeutet dieses Konzept für die Begleitung von Praktika in der Lehrerinnen- und Lehrerbildung?', in Rheinländer, K. and Scholl, D. (eds.) Verlängerte Praxisphasen in der Lehrer*innenbildung. Konzeptionelle und empirische Aspekte der Relationierung von Theorie und Praxis. Bad Heilbrunn: Klinkhardt, pp. 23–38. https://elibrary.utb.de/doi/book/10.35468/9783781558038

Dadze-Arthur, A. and Mörth, A. (2021) 'Testing ZELPH ['sɛlf] – A self-assessment instrument to surface intended and unintended outcomes of work-integrating pedagogies', Journal of Work-Applied Management, 13(1), pp. 36–50. https://doi.org/10.1108/JWAM-11-2020-0047

Dewey, J. (1916) *Democracy and Education. 'An Introduction to the Philosophy of Education'*. Originalwerk veröffentlicht 1916. Reprint, New York, NY: MacMillan, 1930.

DGWF (2005) 'DGWF Empfehlungen. Qualitätssicherung und Akkreditierung wissenschaftlicher Weiterbildung'. Hamburg. Available at: https://ams-forschungsnetzwerk.at/downloadpub/AkkwW_DGWF.pdf (Accessed: 23 October 2023). DGWF (2010) 'DGWF-Empfehlungen zu Formaten wissenschaftlicher Weiterbildung'. Available at: https://dgwf.net/files/web/service/DGWF-empfehlungen_formate_12_2010.pdf (Accessed: 23 October 2023).

DGWF (2013) 'Qualitätsdimensionen der Wissenschaftlichen Weiterbildung'. Konstanz. Available at: https://dgwf.net/files/web/LG/lg-baden-wuertemberg/Qualitaet-DGWF-LG-BW.pdf (Accessed: 23 October 2023).

DGWF (2018) 'Empfehlung der Deutschen Gesellschaft für Wissenschaftliche Weiterbildung und Fernstudien e. V. zur Struktur und Transparenz von Angeboten der wissenschaftlichen Weiterbildung an Hochschulen in Deutschland'. Köln. Available at: https://dgwf.net/files/web/service/publikationen/DGWF_WB-Abschluesse.pdf (Accessed: 23 October 2023).

Eisenhardt, K.M. (1989) 'Building theories from case study research', Academy of Management Review, 14(4), pp. 532–550.

European Union (2023) 'Eurostat regional yearbook. 2023 edition'. Publications Office of the European Union. Luxembourg. Available at: https://ec.europa.eu/eurostat/documents/15234730/17582411/KS-HA-23-001-EN-N.pdf (Accessed: 23 October 2023).

Flechsig, K.-H. (1975) 'Handlungsebenen der Hochschuldidaktik'. Hagen: Zentrales Institut für Fernstudienforschung.

Flechsig, K.-H. (1989) 'Ebenen didaktischen Handelns in der Weiterbildung', in Guettler, R. and Peters, O. (eds.) Grundlagen der Weiterbildung – Praxishilfen (Loseblattsammlung) 5.10. Neuwied.

Flechsig, K.-H. and Haller, H.-D. (1975) 'Einführung in didaktisches Handeln: Ein Lehrbuch für Einzel- und Gruppenarbeit'. Stuttgart: Klett.

Fox, M., Martin, P. and Green, G. (2007) 'Doing practitioner research'. London: SAGE. Gibbons, M. et al. (1994) The new production of knowledge: The dynamics of science and research in contemporary societies. Reprint, London: SAGE, 2010.

Glaser, B. G. and Strauss, A. L. (1967) 'The discovery of grounded theory: Strategies for qualitative research'. Reprint, New Brunswick, NJ: Aldine Transaction, 2006.

Graf, L. (2016) 'The rise of work-based academic education in Austria, Germany and Switzerland', Journal of Vocational Education & Training, 68(1), pp. 1–16. https://doi.org/10.1080/13636820.2015.1107749

Haraway, D. J. (2016) 'Staying with the trouble: Making kin in the Chthulucene'. Durham, NC: Duke University Press.

Helyer, R. (2015) 'Learning through reflection: The critical role of reflection in work-based learning (WBL)', Journal of Work-Applied Management, 7(1), pp. 15–27. https://doi.org/10.1108/JWAM-10-2015-003

Jütte, W. (2015) 'Anforderungen an eine (Hochschul-)Didaktik des lebenslangen Lernens', in Balke, J. et al., Gestaltung von Zu- und Übergängen zu Angeboten der Hochschulweiterbildung. Handreichung der wissenschaftlichen Begleitung des Bund-Länder-Wettbewerbs 'Aufstieg durch Bildung: offene Hochschulen', pp. 64–72. https://doi.org/10.25656/01:12990

Kelle, U. and Kluge, S. (2010) 'Vom Einzelfall zum Typus: Fallvergleich und Fallkontrastierung in der qualitativen Sozialforschung'. 2nd ed. Wiesbaden: Springer.

Klages, B. and Mörth, A. (2023) 'Theorie-Praxis-Probleme in der wissenschaftlichen Weiterbildung. Domänenspezifische Formen organisationaler Differenzbearbeitung', in Mensching, A. et al. (eds.) Organisation zwischen Theorie und Praxis. Jahrbuch der Sektion Organisationspädagogik. Berlin: Springer.

Kondratjuk, M. (2017) 'Soziale Welt Hochschulweiterbildung: Figurationsmerkmale, Arenastruktur, Handlungsmodell'. Bielefeld: Bertelsmann.

Lave, J. and Wenger, E. (1991) 'Situated learning. Legitimate peripheral participation'. Reprint, Cambridge: Cambridge University Press, 2008.

Lester, S. and Costley, C. (2010) 'Work-based learning at higher education level: Value, practice and critique', Studies in Higher Education, 35(5), pp. 561–575. https://doi.org/10.1080/03075070903216635

Lowndes, V. and Roberts, M. (2013) 'Why institutions matter: The new institutionalism in political science'. Houndmills: Palgrave Macmillan.

Mörth, A. et al. (2018) 'Theorie und Praxis verzahnen in Studienangeboten wissenschaftlicher Weiterbildung. Ergebnisse einer fallübergreifenden Studie. Thematischer Bericht der wissenschaftlichen Begleitung des Bund-Länder-Wettbewerbs 'Aufstieg durch Bildung: offene Hochschulen". https://doi.org/10.25656/01:15711

Mörth, A. (2020) 'Quality management in german higher education: Approaches and challenges in university continuing education', in Nuninger, W. and Châtelet, J.-M. (eds.) Handbook of research on operational quality assurance in higher education for life-long learning. Hershey, PA: IGI Global, pp. 1–26.

Mörth, A. (2022) 'Die müssen ja kommunizieren – Practitioner Research als didaktischer Wissenstransfer', in Moll, G. and Schütz, J. (eds.) Wissenstransfer – Komplexitätsreduktion – Design. Bielefeld: Bertelsmann, pp. 207–222. https://doi.org/10.3278/6004796w

Mörth, A. (2023) 'Zum didaktischen Umgang mit Theorie-Praxis-Unterscheidungen in der wissenschaftlichen Weiterbildung'. Doctoral Thesis. Bielefeld: Universität Bielefeld. https://doi.org/10.4119/unibi/2981607

Mörth, A. and Cendon, E. (2019) 'Theorie-Praxis-Verzahnung als zentrales Element von Formaten wissenschaftlicher Weiterbildung', Zeitschrift Hochschule und Weiterbildung, (1), pp. 40–47. https://doi.org/10.4119/zhwb-1175

Mörth, A., Cendon, E. and Klages, B. (2020) 'Work-based Learning als Beitrag zur Öffnung von Hochschulen', in Cendon, E. et al. (eds.) Wandel an Hochschulen? Entwicklungen der wissenschaftlichen Weiterbildung im Bund-Länder-Wettbewerb "Aufstieg durch Bildung: offene Hochschulen". Münster: Waxmann, pp. 127–146. https://doi.org/10.31244/9783830991069

Mörth, A., Klages, B. and Cendon, E. (2020) 'Aspekte von Work-based Learning in (Studien-) Angeboten wissenschaftlicher Weiterbildung. Ergebnisse einer partizipativen Aktionsforschung. Thematischer Bericht der wissenschaftlichen Begleitung des Bund-Länder-Wettbewerbs 'Aufstieg durch Bildung: offene Hochschulen". https://doi.org/10.25656/01:18969

Mörth, A. and Pellert, A. (eds.) (2015) 'Handreichung Qualitätsmanagement in der wissenschaftlichen Weiterbildung: Qualitätsmanagementsysteme, Kompetenzorientierung und Evaluation. Handreichung der wissenschaftlichen Begleitung des Bund-Länder-Wettbewerbs 'Aufstieg durch Bildung: offene Hochschulen". https://doi.org/10.25656/01:12991

Mörth, A. and Schiller, E. (2017) ',....die bringen so viel mit" Wie Lehrende Studierende in der wissenschaftlichen Weiterbildung wahrnehmen und ihre Lehrstrategien davon ableiten', Zeitschrift Hochschule und Weiterbildung, (2), pp. 52–56. https://doi.org/10.4119/zhwb-214

Raelin, J.A. (2007) 'Toward an epistemology of practice', Academy of Management Learning & Education, 6(4), pp. 495–519. https://doi.org/10.5465/amle.2007.27694950

Sánchez Vázquez, A. (1977) 'The philosophy of praxis'. London: Merlin Press.

Schäfer, H. (ed.) (2016) '*Praxistheorie: Ein soziologisches Forschungsprogramm*'. Bielefeld: transcript. https://doi.org/10.14361/9783839424049

Schäffter, O. (2017) 'Wissenschaftliche Weiterbildung im Medium von Praxisforschung – eine relationstheoretische Deutung', in Hörr, B. and Jütte, W. (eds.) Weiterbildung an Hochschulen. Der Beitrag der DGWF zur Förderung wissenschaftlicher Weiterbildung. Bielefeld: Bertelsmann, pp. 221–240.

Schön, D.A. (1983) 'The reflective practitioner: How professionals think in action'. New York, NY: Basic Books.

Schrader, J. (2011) *'Struktur und Wandel der Weiterbildung'*. Bielefeld: Bertelsmann. https://elibrary.utb.de/doi/pdf/10.3278/9783763948475

Seitter, W. (2017) 'Wissenschaftliche Weiterbildung. Multiple Verständnisse – hybride Positionierung', Hessische Blätter für Volksbildung, 67(2), pp. 144–151. https://doi.org/10.3278/HBV1702W 'Standards and Guidelines for Quality Assurance in the European Higher Education Area' (ESG) (2015). Brussels. Available at: https://www.enqa.eu/wp-content/uploads/2015/11/ESG 2015.pdf (Accessed: 23 October 2023)

Strauss, A. L. and Corbin, J. M. (1990) 'Grounded Theory: Grundlagen qualitativer Sozialforschung'. Reprint, Weinheim: Beltz, 1996.

Ten Berge, H. and Lam, I. (2023) 'Wederkerigheid en maatwerk in didactiek voor onderwijs voor professionals', Tijdschrift voor Hoger Onderwijs, 41(2), pp. 114–128. https://doi.org/10.59532/tvho.v41i2.15693

Walber, M. and Jütte, W. (2015) 'Entwicklung professioneller Kompetenzen durch didaktische Relationierung in der wissenschaftlichen Weiterbildung', in O. Hartung and M. Rumpf (eds.) Lehrkompetenzen in der wissenschaftlichen Weiterbildung. Wiesbaden: Springer, pp. 49–64. https://doi.org/10.1007/978-3-658-08869-9 4

Walber, M. and Meyer, K. (2020) 'Professionalisierung in der wissenschaftlichen Weiterbildung', in W. Jütte and M. Rohs (eds.) Handbuch Wissenschaftliche Weiterbildung. Wiesbaden: Springer, pp. 153–171. https://doi.org/10.1007/978-3-658-17643-3 8

Wall, T. (2017) 'A manifesto for higher education, skills and work-based learning: Through the lens of the Manifesto for Work', Higher Education, Skills and Work-Based Learning, 7(3), pp. 304–314. https://doi.org/10.1108/HESWBL-06-2017-0036

Wallin, A., Nokelainen, P. and Mikkonen, S. (2019) 'How experienced professionals develop their expertise in work-based higher education: a literature review', Higher Education, 77(2), pp. 359–378. https://doi.org/10.1007/s10734-018-0279-5

Wenger, E. (1998) 'Communities of practice: Learning, meaning and identity'. Cambridge: Cambridge University Press.

Wenger, E. (2010) 'Communities of Practice and Social Learning Systems: The Career of a Concept', in Blackmore, C. (ed.) Social Learning Systems and Communities of Practice. London: Springer and Open University, pp. 179–198.