

Peer-Reviewed Article

The Reflexible Person:

Toward an Epistemological Learning Culture

Rolf Arnold

Department of Education, TU Kaiserslautern
arnold@sowi.uni-kl.de

Michael Schön

Department of Education, TU Kaiserslautern
michael.schoen@sowi.uni-kl.de

Abstract

Referring to the European and especially the German education system, this article first identifies that both forms of governance in educational systems as well as pedagogical professionalization have fallen behind. We present new proposals for a substantive and evidence-based reinterpretation and reshaping of what education is and can be and how educational systems can be changed. In order to address these shortcomings, we follow suggestions of a systemic-constructivist pedagogy, and highlight concrete strategies, and starting points of an awareness-based system change in the field of educational system development are pointed out. This attempt to not only rethink education, but also to shape it, is based on a critical analysis of the often stagnant internal educational reforms and the concepts and routines that characterize these stagnant reforms. We hypothesize that, in order to break free from this stagnation, a continuous self-transforming subjectivity of the responsible actors is necessary. This explanatory framework is extended in this article to the figure

of the “reflexible person” (Arnold, 2019a), whose main characteristic is reflexivity, in the sense of being reflexive as well as flexible. The reflexible person possesses practiced and strengthened competencies for observation and reflection including of the self, as well as reinterpretation and transformation. These competences are substantiated and specified as prerequisites and effective conditions for an awareness-based system change in educational systems. In addition, possible ways of promoting and developing them are pointed out.

Keywords

vocational education; vocational training; learning culture; self-awareness; self-reflection; personality development

Introduction

This article is both analytical and programmatic. We begin with the evident processes of change in the labor market and in society, which have led to changed expectations of the education systems of modern societies. These expectations are illustrated by the example of European—especially German—education policy.

New policies:

- found their early expression beginning in 1987 in efforts to improve vocational education and training (VET), the possibilities and effects of which were tested and researched in state-funded pilot projects (see, e.g., Staudt, 1993);
- led to redefining the concept of education in Germany’s first national education report in 2006, which identified individual regulatory competence as the primary concern of education (Konsortium Bildungsberichterstattung, 2006);
- became binding through the European Qualifications Framework of 2008, which mandated that national education systems develop competences for meeting new (!) demands (European Parliament Council, 2008); and
- are also reflected in memoranda of German employers and employers’ associations, which promote an expanded understanding of education that encompasses more than professional competence (e.g., VBW, 2015).

The programmatic nature of the argument presented here results from our impression that these expectations of the education systems have not yet been reflected in new governance forms (e.g., school development, pedagogical leadership), and pedagogical professionalization (e.g., teacher training) on a broad scale. We assume that the delays are the result of vain attempts to understand, judge, and shape the future of education using the concepts and explanations of the past.

In this paper, we make new proposals for a substantive and evidence-based reinterpretation and reshaping of what education is and can be. We also discuss whether education systems are in fact capable of being changed. In doing so, we follow the suggestions of a *systemic-constructivist pedagogy* (e.g., Arnold & Siebert, 1995; Marlowe & Page, 1998; Reich, 1996), which in recent decades has increasingly developed into a science of the self-organization of the systemic at the individual, organizational, and societal levels (e.g., Arnold, 2015, 2017; Bagnall & Hodge, 2018; Boyer et al., 2014; Siebert, 2017). These proposals arise from our own research and experiments in processes of systemic change at the levels mentioned.¹ *For the first time*, they highlight concrete strategies and starting points of awareness-based system change in the field of educational systems.

This attempt not only to rethink education, but also to shape it, is based on a critical analysis of internal educational reform and its concepts and routines (point 1 below). It spells out the need for new subjectivity, or *flexibility*, by the responsible actors, as described by Richard Sennett (1998), among others. This explanatory framework is extended here to the figure of the “reflexible person” (Arnold, 2019a, p. 2ff.) (point 2 below). The *reflexible person* has strengthened and renewed competences that include the ability for an observation that includes the self (thereafter named as self-included observation), reflection, reinterpretation, and reimagining. In this paper these competences will be positioned as prerequisites for an awareness-based transformation of educational systems. Furthermore, we will identify possible ways of promoting and developing these competences (point 3).

The education systems we focus on here are the general vocational education systems, as well as higher education. In these systems, the aforementioned concerns about change and education policy have been debated repeatedly over the past 20 years, without, however, producing any sustainable systemic change.

Innovation and Stagnation

Amongst the main concerns and tasks of educational institutions in modern societies is to anticipate future demands on society and to that end develop training and education program in the present moment, that serve to prepare current students to meet these anticipated future demands (Billett, 2011; Sylte, 2020). The pedagogical considerations placed on these programs therefore focus on the future and the assumed ways it relates to the present. But in times which are characterized by a steady increase in knowledge, and by a trend in which innovations are increasingly shaped by disruptive solutions, it becomes increasingly challenging for the systems of economy and education alike to try to

¹ Our research took place in educational settings in Colombia, Honduras, Bosnia, Luxembourg, and Belgium, as well as in company personnel development, management training, and teacher training.

predict future requirements of economy and society *and* to derive curricular specifications out of these.

These tendencies fundamentally challenge traditional notions of education, since the supposedly safe ground of what once was seen as professionally unambiguous and necessary in itself is now subject to erosion. At the same time one can discern both professionalization and de-professionalization, which recalibrate the actions of teachers and learners (Maclean & Wilson, 2009; Siebert et al., 2018) and overcome the focus on the individual. In a digitally connected world, one can no longer expect all competencies to be concentrated in one person.

Instead, networks of people with different specializations and competitive advantages are expected. Both individuals and organizations must learn to deal with unpredictability, openness, and uncertainty about the future. In addition to technical and behavioral competences, personality development that strengthens the resilience of individuals is becoming increasingly relevant. The question of how to promote and develop self-learning competences, as well as skills of self-reflection and self-transformation, will become more relevant for future education systems.

In recent years, the educational sciences, above all systemic-constructivist pedagogy, have turned to questions about the possibilities and limits of awareness-based change in individuals, groups, organizations and societies. In doing so, they have increasingly considered the assumption that targeted interventions in established structures of habit and certainty are hardly possible. Since cognition and emotion are understood and described as relatively closed autopoietic systems, changes to these systems can only be initiated as processes of self-transformation (Dekkers, 2017; Thompson, 2007).

While such a self-transformation can be stimulated, facilitated and accompanied, its effects cannot be guaranteed (Arnold, 2019b). Nonetheless, it is possible to observe and get a felt sense of the inner interrelationships of these transformative processes. Also, one can increase the probability of leading to effects through resonant forms of engagement and facilitation (Boyatzis & McKee, 2005; McKee et al., 2008; Rosa, 2019). Such a systemic view of things is oriented toward outcomes, i.e., *observing impact* and *using resonance*. In simple terms we are referring with the latter to the abilities of connecting with others, understanding their desires and helping them to enhance their capacities (McKee et al., 2008). At the same time, the pedagogical discourse has begun to move away from naive hopes of the efficacy of intervention as well as from linear-mechanistic concepts of instruction. Instead it shifted toward trying out pedagogical forms that enable (rather than produce or even force) the expected and desired development of competencies as processes of a self-organized maturation of systems (e.g., Brater, 2020; Morris, 2019a).

The didactical implications of this paradigm shift are fundamental: In learning, the formerly dominant role of teaching is moved to the margins, while a view on the competence-building effect of learning processes that are largely self-

organized comes into focus (Arnold, 2019a; Morris, 2019b). The same applies to concepts of didactics: curricular didactics is partially lost and is partially replaced by what Arnold and Schön (2019) frame as enabling didactics. In the process, notions of a first-order identity and competence development have evolved into notions of second-order learning (Arnold, 2021)—hence in today’s education the focus is no longer primarily and exclusively on learning about something (first-order learning), but on learning to learn and to optimize the sustainability of what has been learned (second-order learning).

Learning thereby becomes the primary vehicle for personality formation, the core of which involve the abilities to reorient and to change oneself as well as to take responsibility for one’s own learning process. At the same time, the rootedness of identity and competence development in deep emotions is given greater consideration. Also, it is recognized that new forms of pedagogical professionalism are necessary to initiate, accompany, and shape the transformation of emotional-cognitive certainties and routines in resonant ways.

This paradigm shift is clearly shaping research and theory formation in European and especially German-language pedagogical discourse (Brater, 2020; Siebert, 2017; Sloane, 2020). In our opinion, the urgently needed implementation of this paradigm shift in schools, companies, adult education institutions and universities has only just begun. The evidence of pedagogical research (e.g., on the provable interactions between teaching and learning or the ineffectiveness of educational interventions in general), in many places gets lost due to traditional and habitualized pedagogical certainties. From an awareness-based systems change perspective we assume, that these (supposed) certainties can only be effectively tackled with *fresh thinking*—to reach “a deeper source of creativity” (Scharmer, 2009, p.34)—as well as through the strengthening of forms of professionalism that includes the self on the part of the responsible actors (especially leadership and teaching staff) in educational institutions.

From Flexibility to Reflexibility

The first step in *fresh thinking* about education systems and their transformation is to examine and develop a contemporary theory about the function that a socially responsible education should and can fulfill. In this context, “contemporary” marks a benchmark in how far the aforementioned insights into the complex interrelationships of effects in the learning processes of identity and competence development are being considered. The same applies to the goals that education should and can serve. As already mentioned, education—according to the expectations documented at the beginning—should contribute toward strengthening an individual’s ability to self-regulate and enable him or her to successfully cope with new and unforeseen demands. In such competence requirements, the basic subject qualities of flexibility, already described in Sennett’s conception of the “flexible man” (1998), find their expression.

In our opinion, the concept of Sennett’s *flexible person* is of central importance, but at the same time—according to our proposition—it only

imperfectly considers the core of the competence dimensions that are increasingly coming into focus. As outlined in the book *Escape from Teaching* (Arnold 2019a, p. 2 ff.), the changing demands of the new, the unexpected and the disruptive require of people not only “flexibility” (in the sense of openness to change), but also “reflexivity” (in the sense of recognizing and stepping out of familiar patterns of thinking, feeling and acting)—put in one newly created word: “reflexibility” (accompanied by the artificial adjective “reflexible”). The expectation of flexibility on the actors is thereby extended by a dimension that ultimately has to be seen as being epistemological at its core, in which the actor is aware of the self-fulfilling power of his habits of perception and thinking as well as how he or she is internally tied to traditions and routine. The reflexive person knows that these ties always tempt him or her to cling to his certainties and to construct the future based on his own experiences, thus contributing to the future remaining more or less as the past has been.

Not infrequently, this attitude leads the actor to actually miss out on the manifold possibilities the open future holds, due to the holding on to images from the past. In view of spectacular company collapses, as in the case of Kodak or Nokia, or far-reaching environmental scandals, as in the case of the VW Group, many companies today are asking themselves whether they really employ the right specialists and managers. When selecting them, do they only honor adapted or expected thinking and acting, or do they also value deviating or even pattern-breaking potential? How important are moral conduct and social responsibility? Ultimately, the central problem is: How can modern societies ensure not only that their professional and managerial staff imagine the world in the way they have learned, but also that they themselves are the ones who repeatedly question previous solutions? However, it is not only professionals and managers who are expected to be more reflexible. In general, in view of the climate crisis and globalization, modern societies are increasingly confronted with the need to sustainably transform previous ways of thinking and living—a need that comes with very personal consequences for the way people think, feel and act.

The consequences for the educational institutions of modern societies are fundamental. They are required to rethink the offerings and forms of their education. The key question is how learners can be prepared for a future that is open and whose requirements cannot be adequately described simply by projecting what has gone before. So far, educational theory and policy have reacted rather cautiously and with partial corrections. There is talk of, among other things, a clearer focus on developing “self-sharpening qualifications” (Bauerdick et al., 1993, p. 114) or strengthening key *competencies* that enable people to deal successfully with new demands of any kind when they encounter them (Arnold, 2020).

As Brater (2020) notes, for example, one can clearly see how today, in many places, the demands of the world of life and work are turning into demands for the free development of the personality. Accordingly—he argues—any vocational preparation, precisely because it is oriented toward the demands of the world of

work, must increasingly become a *general personality education*. Schools, universities, companies, and educational institutions of all kinds are thus transforming themselves into *competence centers* for dealing with constructions of reality. Therefore, these institutions need in-house “experts of not-knowing”, i.e., experts who understand a lot about identity, personality and competence development, but who can suppress this knowledge in order not to make inappropriate diagnoses or intervene hastily with their own expertise trying to ‘get it right’. The learners must not be deprived of the necessary emotionalizing moment of successfully designing and solving problems by and for themselves. Education can thus become a process of *competence and identity formation* (Arnold, 2019b), which initiates, enables and accompanies the comprehensive personality development of the learners.

Also, the scientific observation and description of these changing forms of education is facing a fundamental turn, for which preliminary work is only available in the context of systemic pedagogy and competence didactics. These disciplines are concerned with the question of how reflecting about and transforming biographically acquired patterns of interpretation can be initiated and shaped, since self-organizing systems always decide for themselves what becomes of the well-meant and professionally contributed impulses that are addressed upon them. Pedagogy as a discipline must therefore increasingly detach itself from an input based conception of education toward a lifespan and change science. Its primary knowledge interest thus lies in gaining a deeper understanding of the self-organization of subjects in their biographical and lifeworld-related embeddedness. On a practical side it is therefore searching for ways of lifting current patterns of thinking, feeling, and acting into the awareness of learners and how to accompany learners in making newly acquired interpretation options a reality. This is because the abilities to construct, reinterpret, and reshape knowledge in Piaget’s sense of accommodation (Piaget, 1964), or in the sense of transformative learning in adulthood (Kegan, 2000), form the very core of lifelong learning, that both prepares subjects for change as well as empowers them to deal with that change in appropriate and successful ways (Arnold, 2021; Eschenbacher & Fleming, 2020). Personality development understood in that way can be defined as the ability to perform *self-reflection* and *dispassionate examination*, as well as *reflexive, socially embedded, and resonant action* (Arnold, 2020).

Personality Development Is Self-development— Self-development Is Awareness Development

Personality development is self-education in a twofold sense: On the one hand personality development emerges from a willingness and movement within the learner; it cannot be triggered in its depth from the outside by didactic inputs. On the other hand, the object of learning for the learner is his or her own self. It is his or her forms of self-expression, his or her preferred ways of thinking, feeling and acting, which he or she chooses or avoids to examine and, if

necessary, engage with in different ways to be both in and with the world. As a consequence, he or she is able to increase the number of possibilities for action he or she has at his or her disposal. This movement, at the same time, also has to be understood as development of awareness.

Learners who engage in this form of education about themselves, are able to imagine the future in different ways than how their own experiences and accumulated knowledge might spontaneously suggest to them. Repeatedly, it is their reflexible abilities that lead them into a loop of reflection coupled with a parallel effort to make one's supposedly familiar world to appear *anew*, that is, with new potentials previously hidden from one's perspective (Arnold, 2019a). This dimension of a reflexible form of personality development builds on epistemological considerations; in itself it has to be understood as an applied epistemology. In this way, it follows the suggestions of the Chilean neurobiologists Humberto Maturana and Francisco Varela, who as early as the 1970s/80s have positioned people's ways of conceptualizing reality and perceptual routines as representing the main concern when focusing on change and in doing so plead for strengthening abilities for a *self-included* observation and reflection (e.g., Maturana, 1978; Maturana & Varela, 1980).

In their work, Maturana and Varela assumed that not only our perception and cognition but also our states of consciousness are merely the result and expression of the senses and brain functions, as well as the biographically acquired patterns of emotion and interpretation (Varela et al., 2016). According to Metzinger (2009), consciousness has a tunnel-like character that allows people to see only what they already 'know', anticipate or fear, and therefore to constantly repeat their lives. However, they can escape this *ego tunnel*, as Metzinger calls it, through "self-included reflection"—such were the hopes of Francisco Varela (Varela et al., 2016, p. 28). Whether, how and in which direction a permanent further development of this "accidental equipment" of humans is possible, and whether a sustainable change in consciousness can be attained via the path of self-included education, is one of the core questions of the still emerging field of consciousness research.

This kind of self-included education detaches itself from the question of *what* the topic or task is and essentially turns to the question of *how* one is accustomed to *interpreting* and *thinking about* the events and which possibilities are seen or overlooked in the process (Arnold, 2014)—a change of perspective that has also been strongly advocated by Peter Senge, among others (Senge et al., 2005, 2008). Presence and mindfulness are seen as core elements of any formative competence in dealing with the unpredictable, as is now empirically supported by numerous studies (e.g., Feuerborn & Gueldner, 2019; Reb et al., 2014; Rupperecht et al., 2019). In order to promote presence and mindfulness, educational offerings (e.g., leadership qualification or higher education) are turning much more to the possibilities of *identity learning*, which leads participants in biographical and thematic search movements for guided self-reflection (Dybbroe, 2012; Illiff et al., 2019; Illeris, 2014). Mindfulness training is also experiencing a significant

upsurge in the commercial education market (Forbes, 2019). American universities have been engaged in contemplative training of their students for decades (Astin et al., 2011; Gunnlaugson et al., 2014); recent social science concepts place mindfulness-based social change practices at the center of thinking about how individuals, organizations and societies can change sustainably (Bockler, 2021).

At the same time, in the context of accelerated and, in many areas, disruptive pushes of modernization (Rosa, 2019), the question gains importance as to whether succeeding in leading a good life in times of change does not depend precisely on being able to take into account and extend previously entrenched forms of observing, interpreting, so as to judge with new or “fresh” forms of reality construction that open up further perspectives. Even if at first there seems to be little to support these new constructions of the future, they can become more and more real if they are consciously focused on, visualized and emphatically practiced. In this sense, Scharmer (2018), for example, speaks of a type of learning that operates from the future—desired, possible or ideal—of the individual, a group, organization or society that wants to or could emerge: *Presencing*.

Such a development of awareness is not only *radically subject-oriented*, it also follows the above-mentioned concept of *second-order learning*. The focus is on the ways in which individual learners appropriate their learning and whilst doing so which of their typical peculiarities are revealed and repeated. The learning practices of the self are at the center of attention: the self’s own awareness of itself and the world. It is also about strengthening the insight that this awareness, as it is, is neither right nor wrong—but that it determines and places boundaries upon the subject, can be predicted, closes off new perspectives and (mis-)leads to inappropriate actions. Such a development of awareness follows the contingent principle that ‘it could also be completely different’ and knows the limitations of self-formation and transformation: Awareness is ultimately only a well-cleaned pair of glasses through which we look at the world—but we can never replace these glasses themselves (Eckoldt, 2017). Nevertheless, over time, people think, feel and act more mindfully and, in many cases, more tolerantly toward themselves and the world if they remain deeply aware of the fact that they too are only capable of looking at the world through their glasses. They learn that they are not able to recognize the world as it is, but only as they themselves are or have become.

Awareness development can nonetheless save us from what we call common awareness traps. These kinds of traps show up when people:

- want to vehemently cling to their habitual ways of feeling and acting about themselves and the world at all costs—even in the face of evidence-based arguments;
- surround themselves with like-minded people in their everyday contexts, modes of information and preferred paths of discourse, or avoid foreign and unsettling contexts;

- hope that scientific ways of knowing and recognizing can also prepare us to develop more effective skills for successfully dealing with highly emotional or destructive experience and/or situations—such an understanding too must be seen as an abridged reading of the adult educational claim to enlightenment;
- implicitly assume that their conscious ways of thinking, representing and judging can connect them to a ‘true’ reality and that this reality also holds evident to others with similar persuasive power. The ‘illusion of conscious thought’ (Carruthers, 2017, p. 228) is unfamiliar to these people.

Awareness development sensitizes people to these everyday threats and supports learners in their search for a strengthening of an inner core which does not have “let us keep up” within its repertoire. A mindset where everything must always be done the same way, just because it has always been done that way, is alien to these learners. Already the simple notion of “keep it up” raises questions about one’s own awareness: What do I want to keep up in dealing with myself and the world, and what do I want to change in the time I have left? In what direction do I want to mature? When do I live consciously, and when am I stuck in repetitions or in forms of thinking, feeling and acting that have nothing or little to do with the current situation and the world around me? How can I interpret and interact more freshly and effectively in shaping a common future? The development of awareness is the effort to achieve an unemotional observer position from which one’s own self and the world can be recognized or perceived with all possibilities that so far had been in one’s blind spot.

The following example serves as an illustration: Leaders who act reflexively know that their impressions are merely easily comprehensible activities of their mind and are therefore able to swim against their own inner current. They have a *meta-consciousness* at their disposal, that can free them from “the prison of their automatic reactions”, as Siegel (2010) describes it. In order to release the reflexive potential of such a meta-consciousness and to further develop it into a mindful attitude, different paths need to be taken, whose usefulness has so far only been rudimentarily tested, and examined in the context of effective leadership development. These paths would have to follow a four-stage strategy, of which each individual stage are dedicated to different development tasks, as shown in Figure 1.

Stages		Description (Development task)
	Transformation – or: practicing self-transformation	Striving for an effective synaptic anchoring and automation of the new expressions of the intended ego in regular focus and meditation work.
	Self-direction – or: the intended ego	Being able to develop a clear picture of one's own forms of feeling and being in the world and imagining this in clear pictures.
	Emancipation – or: the second-order liberation	Being able to detach oneself from adopted or brought-along forms of dealing with oneself and others and to allow other possibilities.
Brain – or: the little brain science		Knowing the transparent mechanisms and workings of our emotion and cognition and how these influence our here-and-now interpretations and reactions.

Figure 1: The BEST strategy of self-transformation

The movement along the four stages of the so called BEST strategy depicted in Table 1 describe the reflexive process of awareness development. In its course, forms of self-observation and self-reflection are practiced, through which learners are enabled to arrive at a changed attitude toward themselves and the world. In this learning process, leaders do acquire some tools that help them to pause, step back and learn to construct anew. The decisive effect, however, is a competence to relativize their own certainties and to deconstruct familiar truths. They literally trans-form their way of observation: they no longer simply observe external circumstances (e.g., operational processes, decision-making situations, conflicts, etc.), but also observe their own observing (Scharmer, 2001). After some practice, they are increasingly able to notice within their own habits when they, once again, are endangered to fall into repetitive loops in which they routinely interpret the world and do not create an internal space for other possible ways of seeing and evaluating. They realize that they are in the process of *leading from the past* (Scharmer, 2009, 2018) and thereby helping to ensure that the future will become like the past has been.

Heading toward Epistemological Learning Cultures

The question “How do we know what we know?” marks the way to a different culture of observing, judging and interacting in organizations as well as in processes of teaching and learning. The main focus lies on the goal of relating to

each other in more resonant ways and being open to differences and diversity. The aforementioned abilities to deal (re-)flexibly with one's own observations and acts of judgement as well as to change habitual patterns of thinking, being and cooperating are fundamental prerequisites to achieve this goal. They are also at the center of recent discussions around agility as being a foundation for leadership and learning organizations (Arnold, 2021). We argue that agile thinking, feeling and acting should themselves follow a disruptive logic. This means that actors must increasingly practice not always seeing the old in the new, nor wanting to develop the future with the means of the past—and thus missing out on emerging opportunities (Rigby et al., 2020). Companies must constantly question and literally attack themselves disruptively to avoid being surprised by disruptions—or competitors—from the outside. In this context, there is scientific talk of epistemological learning as well as corporate cultures (Langemeyer, 2015).

Epistemological learning and cooperation cultures are based on the inner—ultimately also emotional—capacities of the actors, who decide which changes they aspire to or are confident in and able to endure. Contemporary leadership development therefore offers opportunities for biographical self-reflection and self-transformation (Arnold, 2014), in which the question of how one thinks, feels and acts can be clarified. Only based on such clarifications can *disruptive thinking* emerge (von Mutius, 2017). By this we mean a view of the world and of oneself that is not oriented to standards of the past but to possibilities of the future. Crucial for this are personal—and to a certain extent extra- or supra-disciplinary—key competences (e.g., Brockmann et al., 2011; Weinert, 2001), such as the abilities:

- to change cherished perceptions and routines,
- to communicate and cooperate synergistically,
- to learn in a self-directed manner,
- to independently develop, assess and use sources of knowledge,
- to shape new demands and issues, as well as
- to act in a self-responsible and just manner.

In this context, a sustainable *transformation* of one's own orientations and competencies presupposes that the encounter with other ways of shaping and enduring the world can be designed in emotionally moving and destabilizing ways (e.g., Erpenbeck, 2018; Erpenbeck & Sauter, 2019; Mezirow & Taylor, 2009; Mälkki, 2019; Morris, 2020; Taylor & Cranton, 2012, 2013). Thereby, value orientations come into play that support the bridging of missing knowledge and help to shape action.

Numerous companies are asking themselves whether and how values and attitudes can be changed and developed (Permantier, 2019), e.g., to allow *disruptive personality types* to mature—a question on which moral pedagogical research of recent decades has already produced some insights. Research in this

mentioned field has shown that people form their supporting value orientations already in the dense emotional experiences of childhood (Teschmer, 2014). These value orientations cannot be changed in later life through information, instruction and discourse or even persuasion. Only in genuine *emotional resonance* in direct encounter—similar to those we had been exposed to in our early lives—can a lasting change in value orientations be triggered (Arnold, 2019a). In order to ensure such an emotional contextualization of change, it is not necessary to address and connect the actors themselves to their own critical life events. Even the idea of upcoming changes (e.g., in the professional role, at work, in the partnership, etc.) can have an emotionalizing effect. In this case, one's own insecurities or fears become the topic (e.g., in case of illness, loss) and the potential shock becomes a connecting point to initiate profound clarifications of values.

At the core of resonant forms of human resource development is a more conscious attitude of employees toward themselves and toward life. Epistemological learning and corporate cultures can develop if trainees, students and employees deal with the following questions at an early stage: “Who am I? What are my most deeply felt values? Do I have a mission or purpose in my life? Why am I in college? What kind of person do I want to become? What kind of world do I want to help create?” (Astin et al., 2011, p. 1).

Interestingly, the very question about the human condition seems to be frighteningly unpopular in contemporary pedagogy. Yet it is precisely the view from the outside—the view from the non-self—that opens up access to explanatory approaches that go beyond our own previously held thought patterns. A large number of North American educators and scholars from a wide range of disciplines support such a transformative perspective and either positioning a contemplative turn or are working to develop contemplative pedagogies (e.g., Astin et al., 2011; Barbezat & Bush, 2014; Gunnlaugson et al., 2014; Palmer et al., 2010). For them, the insight is fundamental: that people are not what they think they are, and that they also do not have to remain how they—accidentally (!)—have become through the conditions and peculiarities of their lives. The goal of a contemplative, transformative pedagogy is to foster a mindful, differentiating and formative approach to reality—both of one's internal and the supposed external reality. In particular, the aim is to develop the ability to become clearly aware of one's own subjectivity in the world and to use this awareness without bias (Roth, 2014). With such an attitude—a first-person approach to mindful observing, as we already know it from Edmund Husserl's phenomenology (Husserl, 1931, 1970)—one learns to observe, feel and act differently; one leaves behind both the third-person approach and the object-centered approach of scientific observing.

Such “self-included reflection” (Varela et al., 2016, p. 28) follows Ludwig Wittgenstein's observation that “Because it seems so to me—or to everybody—it does not follow that it is so” (Wittgenstein, 1977, p. 29). Those who practice mindfulness in this way act in the unemotional awareness of how trivial and

transparent their own perceptions, judgments, language and interaction work within them. It becomes clear to the practitioner that people constantly fall short of their possibilities and that often their own lives repeat unreflexive patterns. “Have courage to use your own reason”, Immanuel Kant once declared as a motto of the Enlightenment (Kant, 1784/1963, p. 3), and this invitation could also be applied to breaking open our own entrenched thought patterns in order to reflect on them intentionally and to transform them, if necessary.

The concern of a more contemplative and self-reflexive educational movement is to deepen one’s own or individual access to the world. This involves dimensions of personality and attitude formation that are not new but had already been positioned alongside the material theories of education following Wilhelm von Humboldt (Bruford, 1975). This form of personality education is about strengthening the ego-forces and potentials of the individual, and about promoting well-grounded ways of positioning oneself alongside what life actually means and continuously developing his or her self-education and self-learning competences. A sustainable promotion and development of such competences has less to do with the contents of curricula, study and training regulations than with the emotional imprints and experiences of the individual within his or her own biographical development. The learner can question and break open these imprints through guided and accompanied self-reflection. Such a mindful self-reflexive form of dealing with one’s own ego states (e.g., one’s own parental or professional role, or disengagement) confronts learners with the task of active and anticipatory self-socialization. For them, the new clarification of the ideal Self is a constant task. This becomes a central component of a curative self-care in an agile attitude to life. For this attitude the systemic guiding principle also applies, that externally there can only be possibilities to interpret and endure (one’s own) world drawn from those which have been laid as foundation internally.

Let us illustrate this with another example. Following our explanations above, learners are required in their daily self-care to face the imagination of their personal ideal state—be it as creators of lively encounters or sustainable development processes. This movement can be stimulated and supported by guided meditation, such as that outlined in Figure 2. Our own experience in numerous seminars has shown that guided meditation can lead learners to a radical ego clarification that revolves around the question of who we actually are outside of our habits of thinking and feeling, which we ourselves notice and which we can observe. In doing so, we can gradually arrive at an inner core that senses itself merely as an observer who recognizes itself, recognizes that it recognizes, senses and tries other possibilities, practices to refer itself to this inner core so as not to get caught in cycles of (re-)acting in expected ways. In this movement, we do not “clarify” this ego question conclusively, but we learn to observe how we deal with the question in our lives: using language formulas, being evasive, doubtful, defiant, etc. Agility in this context means being able to leave one’s own universe and being able to move into multiverses—seeking diversity and engaging with it. Taking the step into a distanced observer position

in relation to what one has biographically become and what encompasses one's lifeworld is an achievement that can be compared to Münchhausen's gesture of pulling himself out of the swamp by his own hair. This is a very vivid image, which has already been used in the systemic debate (Watzlawick, 1990).

Detach yourself from the intention to influence the thoughts, feelings and actions of others and dedicate yourself to your 'inner job'!	
Phase	Instruction/question
Retrospect	1. Through which perspectives have I learned to look at and endure the world?
	2. Which guiding distinctions have I learned and adopted before today (e.g., good—evil, just—unjust, living—dead)?
	3. Who set an example for me?
	4. Did I observe other distinctions in others that I did not adopt?
Imagination of a new alternative self	5. I detach myself from my simple guiding distinctions in order to trace the diversity of life.
	6. I develop and follow other guiding distinctions (e.g., development-promoting—development-preventing, appreciative—non-appreciative, dominant—resonant).
	7. I am able to deal with unpleasant or even destructive feelings by repeatedly making it clear to myself that they are merely inside me.
Habitualization	8. I start the day by observing my body and its emotional state and devote myself to it lovingly.
	9. I practice other states of emotion that I learn to call up in myself.
	10. I observe every day how I—preferentially—observe and look self-critically at this routine that only lets be what I know!
	11. I observe more perceptively and pay more attention to the resonance in the other person than to my own ideas.

Figure 2: Meditation for learners: My life is (also) daily focus work (Arnold, 2019c, p. 218).

Ultimately, our own attitudes determine how we deal with knowledge and certainties. Those who lack the ability to be contemplative may be more likely to believe in a worldview of technical controllability and objective truths, while those with contemplative abilities are more likely to seek connection and commonality. Above all, the focus is on the search movement and consensus. You have to be fully aware of the Socratic observation that all you know is that you do not know. Those who recognize that there is no ultimate solution to be found do not freeze in the delusion and paralysis of illusory and supposed certainties, but continue on a mindful search. People are sustained by the connection of their felt identity and plausibility, which is why truly sustainable learning can only succeed if learners can be moved to dense emotional processes of feeling, self-awareness, and self-transformation. The transformation and maturation of competences thus does not require a didacticization, but the emotionalization of what one learns.

Conclusion

Especially in disruptive situations, people use the survival mechanism of human cognition to grasp the new with the help of old and established patterns of thinking, feeling, and acting. Initially, they evaluate new possibilities through the lens of the familiar. To some extent, our society is repeatedly threatened by a continuity trap that leads us, even if not intentionally, to believe that everything can and will strictly conserve the way it has always been. Caught in this trap, we are always busy tackling and trying to solve the problems of the future with the same ways of thinking that created these problems in the first place. Only through awareness can the continuity trap be broken.

For an epistemological culture of learning and cooperation in organizations and companies to be developed, an understanding of the circularity, constructiveness, and relativity of one's own perception is essential. A *reflexible attitude* on the part of employees and managers makes it possible to recognize and transform interdependencies. As a result, the share of communication about these processes of transformation also grows in those areas of society whose self-image has so far been more technological. This is accompanied by a cultural break that places new demands not only on the managers involved, but also on professionals and experts.

In order to move forward toward an epistemological learning culture and a self-included professionalism and to design awareness-based system change, we have emphasized the following elements in this paper:

- Education is much more than the accumulation of knowledge and skills. It is first and foremost the targeted promotion of the individual's abilities to reflect and be flexible in dealing with new kinds of demands and solving new kinds of problems. Its guiding principle is the reflexible person.
- Developing education systems requires the targeted development and promotion of the self-education and self-change capacities of the responsible actors. The focus here is on transforming their established certainties (e.g., "Rethink education as competence development!") and strengthening their ability to resonate. The focus is not on teaching and instruction, but on enabling self-organized identity and competence development.
- Education systems must redesign the content of their curriculum and how they present it: It is less about equipping learners with traditional knowledge, skills and abilities than about helping learners develop their personalities and awareness in ways that enable them to adjust their attitudes toward themselves and the world.

- The article identifies the key competences for such change. Using the example of “Meditation for Learners: My life is (also) daily focus work” in Figure 2, it demonstrates how these competences can be self-taught.

These self-competences strengthen the ability of responsible actors to deal with their patterns of thinking and feeling. This ability can help them to think *fresh* (Scharmer, 2009); they can detach from their own biographical imprints and perhaps even reinvent themselves. Free from the whisperings of emotional regimes, time slots, and coaching, individuals have the opportunity to understand themselves as well as the new world and to practice new forms of interaction. In this sense, school, university, and vocational training programs need to become places for reflexive and transformative personal development.

References

- Arnold, R. (2014). *Leadership by personality*. Springer Gabler.
- Arnold, R. (2015). *How to teach without instructing: 29 smart rules for educators*. Rowman & Littlefield.
- Arnold, R. (2017). *Power of personal mastery*. Rowman & Littlefield.
- Arnold, R. (2019a). *Escape from teaching*. Rowman & Littlefield.
- Arnold, R. (2019b). *Fake news in science and education: Leaving weak thinking behind*. Rowman & Littlefield.
- Arnold, R. (2019c). *Nichtwissende Beratung. Von der Intervention zur Übung* [Not-knowing counseling: from intervention to practice]. Schneider.
- Arnold, R. (2020). Berufsbildung und Persönlichkeitsentwicklung in Zeiten disruptiver Innovationen. In R. Arnold, A. Lipsmeier, & M. Rohs (Eds.), *Handbuch Berufsbildung* (pp. 279–291). Springer VS.
- Arnold, R. (2021). *Agile Führung aus Geschichten lernen* [Agile leadership learning from experiences]. Carl Auer.
- Arnold, R., & Schön, M. (2019). *Ermöglichungsdidaktik: Ein Lernbuch* [Enabling didactics: a textbook]. Hep Verlag.
- Arnold, R., & Siebert, H. (1995). *Konstruktivistische Erwachsenenbildung* [Constructivist adult education]. Schneider.
- Astin, A. W., Astin, H. S., & Lindholm, J. A. (2011). *Cultivating the spirit: How college can enhance students' inner lives*. Jossey-Bass.
- Bagnall, R. G., & Hodge, S. (2018). Contemporary adult and lifelong education and learning: An epistemological analysis. In M. Milana, S. Webb, J. Holford, R. Walker, & P. Jarvis (Eds.), *Palgrave international handbook on adult and lifelong education and learning* (pp. 13–34). Palgrave Macmillan.
- Barbezat, D. P., & Bush, M. (2014). *Contemplative practices in higher education*. Jossey-Bass.
- Bauerdick, J, Eichener, V., & Wegge, M. (1993). Qualifikationsanforderungen beim Einsatz von CIM und flexiblen Arbeitssystemen. In E. Staudt (Ed.), *Personalentwicklung für die neue Fabrik* (pp. 97–127). Springer.

- Billett, S. (2011). *Vocational education*. Springer.
- Bockler, J. (2021). Presencing with soul: Transpersonal perspectives on awareness-based social change practice. *Journal of Awareness-Based Systems Change*, 1(1), 15–33. <https://doi.org/10.47061/jabsc.v1i1.471>
- Boyatzis, R., & McKee, A. (2005). *Resonant leadership. Renewing yourself and connecting with others through mindfulness, hope, and compassion*. Harvard Business School Press.
- Boyer, S. L., Edmondson, D. R., Artis, A. B., & Fleming, D. (2014). Self-directed learning: A tool for lifelong learning. *Journal of Marketing Education*, 36(1), 20–32. <https://doi.org/10.1177/0273475313494010>
- Brater, M. (2020) Berufsbildung und Persönlichkeitsentwicklung in der historischen Dimension. In R. Arnold, A. Lipsmeier, & M. Rohs (Eds.), *Handbuch Berufsbildung* (pp. 3–14). Springer VS. https://doi.org/10.1007/978-3-658-19312-6_23
- Brockmann, M., Clarke, L., & Winch, C. (Eds.) (2011). *Knowledge, skills and competence in the European labour market: what's a vocational qualification?* Routledge.
- Bruford, W. H. (1975). *The German tradition of self-cultivation: 'Bildung' from Humboldt to Thomas Mann*. Cambridge University Press.
- Carruthers, P. (2017). The illusion of conscious thought. *Journal of Consciousness Studies*, 24 (9–10), 228–252.
- Dekkers, R. (2017). *Applied systems theory* (2nd Ed.). Springer.
- Dybbroe, B. (2012). Work identity and contradictory experiences of welfare workers in a life-history perspective. *Forum: Qualitative Social Research*, 13(2), Art. 21. <https://doi.org/10.17169/FQS-13.3.1903>
- Eckoldt, M. (2017). *Kann sich das Bewusstsein bewusst sein?* [Can consciousness be conscious?] Carl-Auer.
- Erpenbeck, J. (2018). *Wertungen, Werte—Das Buch der Grundlagen für Bildung und Organisationsentwicklung* [Valuations, values - The book of basics for education and organisational development]. Springer.
- Erpenbeck, J., & Sauter, W. (2019). *Wertungen, Werte—Das Buch der gezielten Werteentwicklung von Persönlichkeiten* [Valuations, values—The book of targeted value development of personalities]. Springer.
- Eschenbacher, S., & Fleming, T. (2020). Transformative dimensions of lifelong learning: Mezirow, Rorty and COVID-19. *International Review of Education*, 66,(5), 657–672. <https://doi.org/10.1007/s11159-020-09859-6>
- European Parliament Council (2008). *Recommendation of the European Parliament and the Council of 23 April 2008 on the establishment of the European Qualifications Framework for lifelong learning*. Official Journal of the European Union. [https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32008H0506\(01\)&from=EL](https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32008H0506(01)&from=EL)
- Feuerborn, L. L., & Gueldner, B. (2019). Mindfulness and social-emotional competencies: Proposing connections through a review of the research. *Mindfulness*, 10(9), 1707–1720. <https://doi.org/10.1007/s12671-019-01101-1>
- Forbes, D. (2019). *Mindfulness and its discontents: Education, self, and social transformation*. Fernwood Publishing.
- Gunnlaugson, O., Sarath, E., Scott, C., & Bai, H. (Eds.). (2014). *Contemplative learning and inquiry across disciplines*. State University of New York Press.
- Husserl, E. (1931). *Ideas: General introduction to a pure phenomenology*. Allen & Unwin.

- Husserl, E. (1970). *The crisis of European sciences and transcendental phenomenology*. Northwestern University Press.
- Illeris, K. (2014). Transformative learning and identity. *Journal of Transformative Education*, 12(2), 148–163. <https://doi.org/10.1177/1541344614548423>
- Kant, I. (1963). What is Enlightenment? In L. W. Beck (Ed. & Trans.), *Kant on history* (pp. 3–10). Bobbs-Merrill. (Original work published 1784)
- Kegan, R. (2000). What form transforms? In J. Mezirow & Associates (Eds.), *Learning as transformation: Critical perspectives on a theory in progress* (pp. 35–70). Jossey-Bass.
- Konsortium Bildungsberichterstattung (2006). *Bildung in Deutschland*. Bertelsmann Verlag. <https://www.bildungsbericht.de/de/bildungsberichte-seit-2006/bildungsbericht-2006/pdf-bildungsbericht-2006/gesamtbericht.pdf>
- Langemeyer, I. (2015). *Das Wissen der Achtsamkeit: Kooperative Kompetenz in komplexen Arbeitsprozessen* [The knowledge of mindfulness: cooperative competence in complex work processes]. Waxmann.
- Maclean, R., & Wilson, D. (Eds.) (2009). *International handbook of education for the changing world of work: Bridging academic and vocational learning*. Springer.
- Mälkki, K. (2019). Coming to grips with edge-emotions: The gateway to critical reflection and transformative learning. In T. Fleming, A. Kokkos, & F. Finnegan (Eds.), *European perspectives on transformation theory* (pp. 59–73). Palgrave Macmillan
- Marlowe, B. A., & Page, M. L. (1998). *Creating and sustaining the constructivist classroom*. Sage.
- Maturana, H. R. (1978). Biology of language: The epistemology of reality. In G.A. Miller, & E. Lenneberg (Eds.), *Psychology and biology of language and thought* (pp. 27–63). Academic Press.
- Maturana, H. R., & Varela, F. J. (1980). *Autopoiesis and cognition: The realization of the living*. Reidel.
- McKee, A., Boyatzis, R., & Johnston, F. (2008). *Becoming a resonant leader*. Harvard Business Review Press.
- Metzinger, T. (2009). *The ego tunnel: The science of the mind and the myth of the self*. Basic Books.
- Mezirow, J., & Taylor, E. W. (Eds.) (2009). *Transformative learning in practice: Insights from community, workplace, and higher education*. Jossey-Bass.
- Morris, T. H. (2019a). Adaptivity through self-directed learning to meet the challenges of our ever-changing world. *Adult Learning*, 30(2), 56–66. <https://doi.org/10.1177%2F1045159518814486>
- Morris, T. H. (2019b). Self-directed learning: A fundamental competence in a rapidly changing world. *International Review of Education*, 65(4), 633–653. <https://doi.org/10.1007/s11159-019-09793-2>
- Morris, T. H. (2020). Transformative learning through mindfulness: Exploring the mechanism of change. *Australian Journal of Adult Learning*, 60(1), 44–65.
- Mutius, B. von (2017). *Disruptive Thinking: Das Denken, das der Zukunft gewachsen ist* [Disruptive thinking: Thinking that is up to the future]. Gabal.
- Palmer, P. J., Zajonc, A., & Scribner, M. (2010). *The heart of higher education: A call to renewal*. Jossey-Bass.

- Permantier, M. (2019). *Mindset matters: Shaping leadership and corporate culture for the future*. Short Cuts.
- Piaget, J. (1964). Part I: Cognitive development in children: Piaget development and learning. *Journal of Research in Science Teaching*, 2(3), 176–186. <https://doi.org/10.1002/tea.3660020306>
- Reb, J., Narayanan, J., & Chaturvedi, S. (2014). Leading mindfully: Two studies on the influence of supervisor trait mindfulness on employee well-being and performance. *Mindfulness*, 5(1), 36–45. <https://doi.org/10.1007/s12671-012-0144-z>
- Reich, K. (1996). *Systemisch-konstruktivistische Pädagogik* [Systemic-constructivist pedagogy]. Luchterhand.
- Rigby, D., Elk, S., & Berez, S. (2020). *Doing agile right: Transformation without chaos*. Harvard Business Review Press.
- Rosa, H. (2019). *Resonance: A sociology of our relationship to the world*. Polity.
- Roth, H. D. (2014). A pedagogy for the new field of contemplative studies. In O. Gunnlaugson, E. W. Sarath, C. Scott, & H. Bai (Eds.), *Contemplative learning and inquiry across disciplines* (pp. 97–115). State University of New York Press.
- Rupprecht, S., Falke, P., Kohls, N., Tamdjidi, C., Wittmann, M., & Kersemaekers, W. (2019). Mindful leader development: How leaders experience the effects of mindfulness training on leader capabilities. *Frontiers in Psychology*, 10, 081. <https://doi.org/10.3389/fpsyg.2019.01081>
- Scharmer, C. O. (2001). Self-transcending knowledge: sensing and organizing around emerging opportunities. *Journal of Knowledge Management*, 5(2), 137–151. <https://doi.org/10.1108/13673270110393185>
- Scharmer, C. O. (2009). *Theory U: Leading from the future as it emerges*. Berrett-Koehler.
- Scharmer, C. O. (2018). *The essentials of Theory U: Core principles and applications*. Berrett-Koehler.
- Senge, P., Scharmer, C. O., Jaworski, J., & Sue, F. B. (2005). *Presence: Exploring profound change in people, organizations, and society*. Breaaley.
- Senge, P., Smith, B., Kruschwitz, N., Laur, J., & Schley, S. (2008). *The necessary revolution: Working together to create a sustainable world*. Doubleday.
- Sennett, R. (1998). *The corrosion of character*. Norton
- Siebert, H. (2017). *Lernen und Bildung Erwachsener* [Adult learning and education]. Wbv.
- Siegel, D.J. (2010). *Mindsight. The new science of personal transformation*. Random House.
- Sloane, P. F. E. (2020). Berufsbildungsforschung. In R. Arnold, A. Lipsmeier, & M. Rohs (Eds.), *Handbuch Berufsbildung* (pp. 667–682). Springer VS.
- Staudt, E. (Ed.) (1993). *Personalentwicklung für die neue Fabrik*. Springer.
- Taylor, E. W., & Cranton, P. (Eds.) (2012). *The handbook of transformative learning: Theory, research, and practice*. Jossey-Bass.
- Taylor, E. W., & Cranton, P. (2013). A theory in progress? Issues in transformative learning theory. *European Journal for Research on Education and Learning of Adults*, 4(1), 33–47. <https://doi.org/10.3384/rela.2000-7426.rela5000>
- Teschmer, C. (2014). *Mitgefühl als Weg zur Werte-Bildung* [Compassion as a path to value formation]. V&R Unipress.

- Thompson, E. (2007). *Mind in life: Biology, phenomenology, and the sciences of mind*. Harvard University Press.
- VBW—Vereinigung der Bayerischen Wirtschaft (Eds.) (2015). *Bildung. Mehr als Fachlichkeit*. Waxmann.
- Varela, F. J., Thompson, E., & Rosch, E. (2016). *The embodied mind: Cognitive science and human experience. Revised Edition*. The MIT Press.
- Watzlawick, P. (1990). *Munchhausen's pigtail, or psychotherapy and reality*. Norton.
- Weinert, F. E. (2001). Concept of competence: A conceptual clarification. In D. S. Rychen, & L. H. Salganik (Eds.), *Defining and selecting key competencies* (pp. 45–65). Hogrefe & Huber.
- Wittgenstein, L. (1977). *Remarks on colour*. Blackwell.