

# Life Processes and Learning in Waldorf Pedagogy



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**P**edagogy is the relationship between teaching and learning; it can take the form of an art, a craft, and a science (Nind, Curtin, & Hall, 2016). As an art, pedagogy involves finding a unique balance between activity, content, and meaning-making on the part of the participants (teachers and pupils) in each learning situation. As a craft, it means being able to structure and support learning in ways that are effective in relation to the pedagogical aims. As a science, pedagogy is concerned with developing an understanding of the processes of teaching and learning. This understanding is based mainly on observations of, and reflections on practice. In the case of Waldorf education, such reflections would refer to the generative ideas of Waldorf theory in interpreting observations. Theory, in this sense, means the ideas informing the practice. These have traditionally been based on Rudolf Steiner's pedagogical anthropology as outlined in his lectures on education and based on his foundational work on the origins of knowledge and the nature of the human being further supplemented by the work of many teachers and teacher educators over the years since 1919. I call this body of ideas, *Waldorf theory*. This doesn't prescribe what we have to do, but rather offers us ways of seeing that help us make choices in pedagogical practice. Waldorf theory enables teachers to generate practice, reflect on teaching and learning, and research their field.

Pedagogical practice is never simply the application of a curriculum or a standardized teaching program; rather, it is about using Waldorf theory as a lens to look at and read the actual situation. That is what makes Waldorf different to many other current educational approaches. It requires teachers individually and collectively to be intelligent, responsible, professional, and creative, basing their judgements on interpretations of the evidence consistent with Waldorf understandings of the nature of the human being. However, if Waldorf schools are to justify their claims to autonomy, this must be based on reflective practice, evaluation of pedagogical quality, and systematic inquiry, using Waldorf theory as criteria and orientation.

One cannot be accountable simply by saying, "I did what I thought was right." Steiner (1996c) made this

point when he assured the parents in the first Waldorf school that the teachers regularly review their practice in the light of the principles of Waldorf education and modify or change their practice, where they find it necessary. This, in fact, is the primary function of the collegial school leadership (Gladstone, 1997). Steiner (2004) set the benchmark for this kind of work in the Ilkley Course, where he describes this practice as an ongoing living university (*fortlaufende lebendige Hochschule*), in which teachers share and develop their understandings of pedagogy. Today, we would call this 'participatory action research' or 'illuminative practitioner research'.

This article is a modified excerpt from a forthcoming book that explores ways in which Waldorf teachers can research their practice in scientifically valid ways. As we reach 100 years of Waldorf education, it is more important than ever that this practice keeps pace with the rapidly changing social, political, economic, cultural, and ecological conditions under which children and young people grow and develop. In order to do this, Waldorf teachers must reflect on, evaluate, and research their practice.

## Waldorf Research Using Waldorf Theory

How should Waldorf teachers carry out such research in a way that can be deemed scientific and accountable? I cannot go into methods of research in this article, but I want to make two important points. The first is that action research in Waldorf settings, which primarily aims to change practice, or illuminative practitioner research, which aims to deepen understanding and develop teachers' abilities, has to meet the ethical and research design standards typical of such approaches (see McNiff, 2013; Noffke & Somekh, 2013; Elliott & Lukes, 2008). The second point is that Waldorf research should also use Waldorf theory. This is challenging because in academic circles, Steiner's educational theory is deemed unscientific (Dahlin, 1917). One solution, as Christian Rittelmeyer (1990, 2010) has pointed out a number of times over the years, is to treat Steiner's ideas as heuristic models in an interpretivist approach. In a heuristic

model, an idea or assumption can be used to further investigations by saying: if we assume that such and such is the case, what does this reveal to us about the investigated phenomenon? We don't take that which is assumed as a fact, we use it as a theoretical construct to advance our inquiry; like using a specific lens on a camera, it brings certain things into focus in particular conditions. If this approach proves fruitful in explaining things, then it opens up new ways of seeing. In the social sciences, conceptual metaphors are used in a similar manner to make phenomena visible (Lakoff & Johnson, 2003).

Equally one can construct ideal-types, which build a conceptual bridge between general social phenomena and specific cases that enable us to compare what we expect with what we find. As Peter Kelly (2013) points out, "ideal does not refer to perfect things, moral ideas or statistical averages, it refers to the world of ideas, and ideal types are idea-constructs that help put the chaos of social reality in order" (Kelly, 2013, p. 421). The developmental tasks in the Waldorf Curriculum are a good example for ideal-types: we do not say all pupils are at this stage of development because they are in a particular grade, nor do we say that this is a minimum to be achieved. The ideal type provides us with an idea of what would be realistically desirable as an orientation. As Michael Zech (2017) puts it, "general developmental phases such as seven-year stages or changes between the age of 10 to 12 that can be observed, do not simply occur but are brought about by the pedagogical approach and orientate themselves on the one hand on ideal-types, and on the other, on the actual situation of the pupils" (Zech, 2017, p. 70). The pedagogical task is to bridge the gap between the heterogeneous positions of the individual students and the idea of what they could be in terms of their learning and development. The teacher does this by offering content and methods that challenge the students to activate their learning in ways that generate development. In this sense, the ideas about learning in this article are ideal-types that can be used to reflect on and research practice.

First, I will summarize Waldorf learning theory as it has been more recently formulated. I follow this up with a brief characterization of learning that I think is helpful as a baseline. Then, I outline a number of propositions about learning.

## Waldorf Learning Theory

Steiner's learning theory is distributed across his writings and lectures on the nature of the human being,

in his anthroposophical anthropology and theory of knowledge. It has only recently been formulated in a coherent way as a theory of learning (Loebell, 2016, 2017; Schieren 2012, 2016b). Summarized very briefly, Schieren (2012) identifies the following key aspects of learning that inform Waldorf pedagogy:

### 1. Transformation:

Learning means stepping out of the existing pattern of mental representations we have of the world and actively uniting oneself with reality. This can be prompted by crisis. Learning enables the subject to restore the integration of self and world in a new equilibrium in Piaget's sense.

### 2. Forgetting:

In order to learn one has to forget, which means to loosen the close connections to one's mental representations of the world. Sleep is a part of the learning process.

### 3. Abilities:

The main benefit of learning is the growth of abilities and dispositions.

### 4. Comprehensiveness:

Learning occurs through the fullest possible engagement with reality through direct experience wherever possible. Learning is not about the accumulation of factual knowledge.

### 5. Truth:

Learning is a process of generating knowledge that unites the human being with the world's laws; this process makes the human being capable.

### 6. Meaning:

Engaging the world through such abilities is experienced as relevant and meaningful.

I find this characterization very helpful because it links knowing and the generation of knowledge to learning. I take up the point of transformation below. What is clear is that learning often occurs through an interruption in existing patterns of experience, especially the encounter with the world as Other.

Loebell (2017) characterizes the learning process that is mediated by teaching as:

1. An expression of the activity of the person forming her individuality, which is emergent and open (i.e. rather than fixed and predetermined). Learning is ultimately an

individual process of becoming (more) experienced (Erfahrenerwerden).

**2.** Becoming through experience occurs in different ways in thinking, feeling and willing; in other words, thinking and willing with full consciousness, partial consciousness, and while we are unconscious. The Waldorf approach is to educate both thinking and willing indirectly via the feelings. How this is done varies fundamentally between early childhood, childhood and after puberty, and requires teachers to be artistic in their whole approach.

**3.** Rhythm is a vital aspect of learning. Pedagogy as an art involves structuring and fine-tuning the rhythms of learning.

**4.** Bodily experience leads to embodied cognition, emphasizing the central importance of sensory experience, concrete encounters with the world, and activities involving movement and physical skills.

**5.** The significance of the teacher is vital, not only as a shaper and observer of learning processes but also as an active meaning-maker. The teacher is called upon to be capable of transforming herself, to know and understand the pupils and to awaken a sense of trust in them.

**6.** Steiner emphasizes that learning is an ongoing, life long process.

**7.** What is taught undergoes a metamorphosis at key moments in the biography of the learners. Such key moments of change are around the age of 6-7 and the second dentition, the age of 9-10 and the onset of puberty, and the start of adolescence. The Waldorf approach to teaching and the material that is taught changes at these stages to interact developmentally with the pupils. The curriculum brings learning experiences to the pupils that enable them to engage with developmental challenges.

**8.** Learning involves three qualities of participation in the world: directing attention to the world, social participation of individuals in learning processes (referred to as commitment [Verbindlichkeit]), and individual insight into what appears self-evident.

Following Steiner's account in the *Foundations of Human Experience* (1996b), learning is understood as a sequence of learning processes, sometimes referred to as the three-step process and related to Steiner's account of living concepts, conclusion, judgement and concept. These steps can be summarized as follows:

**1. Taking in:** directly experiencing, encountering, observing, experimenting

**2. Recalling:** describing, characterizing, recording

**3. Processing:** analysing, abstracting, generalizing, deepening, grasping of connections, relationships and laws, constructing concepts.

I will return to these processes below. My exploration of learning builds on this foundation by supplementing it primarily with a social perspective on learning

## Ways of Knowing

We live in an egotistical, selfish, even narcissistic culture that valorizes the success of the individual and puts self-interest before social solidarity. Educational programs often stress the competences related to the neo-liberal concepts of self-determination, self-management, self-efficacy, self-directed learning, and entrepreneurship. This is what the psychologist Paul Verhaeghe (2015) calls the economization of the self. This context enshrines the implicit values of competition and learning as the acquisition of symbolic capital and reinforces social inequality. Even if school curricula espouse other, more socially conscious values, the message of the system is clear: winners take all and no one wants to be a loser. As Verhaeghe puts it, there is no such thing as competitive solidarity. He further catalogues the extensive mental health and societal costs of such an approach.

The anthroposophical emphasis on the I or self sometimes obscures the fact that we are essentially social beings. Certainly, in terms of understanding learning, we need to take both social and individual aspects and their interaction into account. The fact is, whether we want to or not, we learn with, from, through and sometimes in spite of others. To understand the full implications of this, we need to look at the learning process in terms of the relationships this implies between subject and world. As long as we think of learning in terms of the acquisition of knowledge as discrete packages of information that exist in the world 'out there', we are not only playing

into the hands of a neo-liberal world view, but we are overlooking the participatory and interactive nature of learning.

As the educationalist Horst Rumpf (2010) argues (in a German book entitled *What Would Einstein Have Thought If He Hadn't Played the Violin?*), there are two kinds of learning. The first kind involves grasping, conquering, mastering, colonizing, controlling, dissecting, categorizing, instrumentalizing, and utilizing the world for our own enrichment, irrespective of the ecological and cultural costs. This is a positivist, technocratic view of learning as mastery and ownership of something that is not us; that is, setting up what is learned as the *object* to our *subject*. This form of learning requires that we stand back from the phenomena that interest us and observe them in a detached, supposedly objective way. The second form of learning is an attentive, respectful, and open approach of listening to the unknown Other (whether this other is a natural phenomenon, a social phenomenon, or a person). This kind of learning tries to be open to the voice of the Other and what she has to tell us, knowing that this also reveals our own nature, that we become through the Other, that we are ultimately one with the other. This is a phenomenological, participatory form of learning.

The title of Rumpf's book reveals his solution to this binary, by pointing to art as a different way of knowing the world that recognizes both lawfulness and structure as well as giving expression to higher meaning. He makes it clear that we need both types of learning in different situations but makes the point that the first type tends to dominate the educational world because it generates knowledge that can be measured. Clearly, we need other forms of learning and the knowledge they generate. Poetry, art, music, myth and theatre are all ways of knowing about the world. Elliot Eisner (2008) has made the point that art is as valid a way as science is of expressing knowledge and understanding the world. In this context, Eisner (2014) also makes specific reference to the theory of symbolic forms of knowledge, developed by the philosopher Ernst Cassirer. Cassirer distinguished between expressive, representational, and significative (meaning-giving) forms of knowledge. Myth is an example of expressive

thinking, while natural language is an example of representational thinking, which ultimately derives from sensory experience, and significative thinking, which refers to categories of relations rather than concrete experiences and is best known in scientific thinking. Such perspectives open up a space for a spiritual form of thinking, to which I shall return below.

## Learning as Separation and Learning as Participation

What is learning from an anthroposophical perspective? Steiner (1994), in his book *Theosophy*, describes a process in which our soul retains our experiences embodied in memory, and our I, as the spiritual and active core of our being, draws on these experiences and extracts, as it were, their essence transformed into abilities that are incorporated into the I, building-up the I-body. Thus we are transformed. The

I determines what of the person's embodied experiences is essential for its own further development in terms of its spiritual intentions and its own becoming.

Steiner describes the knowledge aspect of learning in his various texts on how knowledge is generated and what this means for the human being's relationship to self and world. Firstly, it is important to state that Steiner's understanding of knowledge is not merely cognitive, but involves the whole human being. Thus knowing is not simply something that involves our heads but permeates our being and is therefore bound up with identity. Very briefly summarized, according to Steiner's (1993) account of knowing, we have sense impres-

sions, which we organize with the help of existing understandings into percepts that initially have no further meaning. We then match these percepts to appropriate concepts, which give the percepts meaning and context and we retain these in the form of representations of our experience. Each time we experience the same or a similar phenomenon, we are able to expand the concept by locating it in an ever expanding context. In other words, we understand what we are experiencing ever more comprehensively, as long as we open ourselves to new dimensions of experience, rather than simply accepting existing understandings without further reflection. Thus we come

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to successively more integrated and multi-dimensional understandings.

Furthermore, in doing so we not only expand our knowledge but we bring reality into being. As Steiner (1963b) puts it, we are not merely passive observers of the world, mirroring in our minds the reality that exists “out there”. Rather, we are active co-creators of reality. The world is in us and we are embedded in the living rhythms and relationships that make up the world. We are *originally* and *ultimately* part of the world; we are participants in world being. The philosopher Owen Barfield (1988), inspired by Steiner, describes these states of being as *original* and *final participation*. What separates us and prevents us from experiencing our actual embeddedness is our intellectuality, as this manifests, for example, in modern scientific consciousness. Both Steiner and Barfield make the case for developing a new consciousness of being at one with the world.

### Researching Spiritual Dimensions

Johannes Kiersch (2010) has added a further dimension to the task of working with Steiner’s ideas in that he draws on the notion that knowledge does not always start with certainty and clarity, but emerges as an inkling of meaning before knowing itself occurs. He draws on Ernst Cassirer’s work on knowledge as symbolic form and in particular on the expressive and representational modes of knowing. Kiersch points out that Steiner, in his Book *Riddles of the Soul* (1983), made a significant breakthrough in his thinking about the relationship between the human and social sciences of his day, which he refers to as anthropology and anthroposophy. Conventional science is based on empirical experience and stops there. Anthroposophy, as a science of the spirit, goes beyond that into the non-sense-perceptible dimensions of being. Steiner sought to build a bridge between these two sciences by positing a boundary zone between them into which we can go to experience things at the edge of the sense perceptible. He spoke of an area (the German word is usually translated as *frontier*, which has some unhelpful associations) at the boundary between the sense world and the super-sensible world. Perhaps it would be better to think of this using the metaphor of transition and an area of transition, because this area is not a clearly marked limit with a fixed delineation, like a wall or fence.

Steiner uses this metaphor of participating in the area of transition to direct our attention to the possibility

of supplementing our sense-based ways of knowing by crossing to an area of transition and sojourning there in order to develop spiritually-based knowing. The important aspect of this activity is that we do this consciously. He suggests we sojourn in this area by taking our theory-based, rational consciousness with us into the ‘super-rational’ (i.e., beyond rationality) world of the spirit. We do this by assimilating knowledge about spiritual aspects of the human being (see, for example, Steiner’s *The Foundations of Human Experience* [1996b]) ‘on this side’ and then direct our gaze at the phenomena on the ‘other side’. Each journey into the transition area takes us further and offers us more certainty. What starts out as an inkling, a presentment, a hunch or feeling, gradually gains contours, shifts from informal knowing to symbolic form. Furthermore, as Kiersch points out, we can sensitize our awareness of the non-material, non-sensory qualities of transitions, processes, qualities, relationships, atmospheres and moods that are realities within the transition area. Our preparation as teachers for ‘reading’ the child, for understanding social processes, experiencing the invisible forces of nature are, on the one hand, regular practice in the arts and in social life, in Goethean observation, and, on the other, in studying and meditating the anthroposophical ideas about learning, growth, and development.

### Life Processes and Learning

In the posthumously-published work *Anthroposophy – A fragment*, Steiner (1996a) attempted to show that within the processes of sense perception, various life processes are at work in our bodies and come to expression in our soul activity. This idea has been taken up by various authors (Lindenau, 1974; van Houten, 1993; Sahlmann, Weihs & Urieli, 1996; König, 1999; Rawson, 1999). Life processes, as Steiner describes them, can be imagined as intelligent structures whose origins are in the living world that we have embodied, and that have been socialized, shaped, and modified by culture and ultimately individualized. Steiner (1996d) refers to the ‘civilizing’ of the natural human being by a culture that raises us from a state in which our behaviour is determined by instinct, drives and passions. Perhaps a more appropriate word than ‘to civilize’ would be to *edify*, which has an etymology that derives the word from a Middle English version of the Latin *aedificare* – to build and shape. We are talking about the classic notion of nature and nurture, though it would be more accurate to talk about the person being *nurtured* and thus socialized and encultured. In the course of our education, we gradually

learn how to form ourselves deliberately. Up until that point, we are socially and culturally shaped.

In Steiner's notion of the life processes, the natural forces of nourishing, growth and reproduction are socialized and then individualized, and thus transformed from natural life forces into forms of cognition. Metaphors of cultivation and domestication are appropriate, since children, like cultivated plants and domesticated animals, require propagation, nourishment, protection, and support in a sheltered space; in other words, they require a healthy and health-generating growing environment. Children, however, not only grow biologically, they also learn, hence the correspondence between the life processes and the cultural processes of learning and development. This is called *Bildung* in German and today is understood to mean a process through which individuals engage bodily and mentally with the world, embodying culture as they do so and thus weaving together self and world, body and spirit, individuality and sociality in search of secure and possible identities. It is a biographical process in which individuals develop their personality within the opportunities and restraints of the social situations they are embedded in (Faulstich, 2013).

## Life Processes and Learning Processes

Influenced by various people, including my first mentor as a teacher, Edith Bierman, who grew up in Dornach and knew Steiner in her younger years, and Wolfgang Schad, with whom I trained to become a high school teacher, I aligned the life processes with the soul/mind processes, as follows (Rawson, 1999):

1. Breathing – perceiving
2. Warming – experiencing sensations
3. Nourishing – visualizing
4. Secreting/Separating/Sorting – judging
5. Maintaining – memory
6. Growing – personality
7. Reproducing – self-development

Van Houten's (1994) interpretation of the seven life processes in adult learning was another variation that I was aware of. His sequence is as follows:

1. Breathing – observing
2. Warming – relating
3. Digesting – assimilating
4. Secreting (sorting) – individualizing
5. Maintaining – exercising
6. Growing – developing new abilities

## 7. Reproducing – creating

In more recent years, I have found it helpful to think of learning in terms of the following processes:

1. Experiencing
2. Forgetting
3. Recalling
4. Processing
5. Practicing, applying
6. Growing abilities
7. Transforming

Essentially, this sequence of processes involves how we experience the world through our senses, what we do with these sense impressions, how we respond to them through thinking, feeling and willing, how we retain them as mental images, how we relate to them and how we make sense of them. The second half of the learning process involves how learning transforms us. It is difficult in some ways to talk about learning in general, unless we meaning the development of the person. Each subject and field has its own learning processes. For this reason, I have framed my approach as a series of propositions that can be applied across different learning situations.

I also think it is helpful to consider some of the more important pre-conditions for healthy learning, which I summarize below. My account of learning complements Steiner's explanation with ideas drawn from other compatible learning theories. Learning is a hugely complex field and the literature is vast. I think it is legitimate to blend learning theories that make similar assumptions about human beings and the learning process. In my book, I go into much more detail in justifying my choice of theory. In this article, I simply refer to the most important thinkers and theoreticians I have drawn on, including John Dewey, Lev Vygotsky, Klaus Holzkamp, Jean Lave, and Étienne Wenger and Barbara Rogoff. As already pointed out, I present my thoughts on learning in the form of a series of heuristic propositions that I invite the teacher to use as 'lenses' or as ideal-types through which they can look at their own practice. I outline each aspect of learning and suggest the kind of research questions one can have (without pre-empting the questions teachers actually have).

## Some Propositions About Learning

**Proposition 1:** *Learning is becoming and we grow and develop through learning. Real learning that involves*

*the whole person, body, soul, and spirit and leads to sustainable change. This kind of learning is transformative. It changes how people relate to themselves and to the world.*

John Dewey (1938) said that each genuine learning experience changes the conditions under which subsequent learning can occur. He called this ‘continuity of experience’ and said that it leads to growth and development. Thus what we learn and how we learn it shapes our becoming and our development. The experiences we have come from two primary sources: the social world in which we are embedded, and how our bodies respond to the world and embody those experiences. Another important scholar of learning, Klaus Holzkamp (1995), pointed out that, seen from the perspective of the learner, the main motivation for learning as growth and development is the learner’s biographical interests. We actively learn in the belief that this will open up further opportunities for learning and realizing our biographical intentions and improving our chances to exercise control over our lives. Holzkamp calls this ‘expansive learning’. The opposite motivation for learning, defensive learning, refers to learning in order to avoid stress from teachers or parents, to learn for the next test or to gain grades or credit points.

A number of more recent researchers have explored just how important learning interests are and how they can be nurtured (Grotlüschen, 2004, 2014; Faulstich, 2013). People’s identities – that is, who they see themselves as – are bound up with their learning and development and what motivates their learning. Biographical learning is a concept that accounts for the way that people learn to recognize the opportunities for expansive learning in a given situation and the extent to which they are able to act towards fulfilling their biographical interests (Alheit, 2009). From an anthroposophical perspective, this approach is referred to as teachers addressing latent questions in the students and includes the challenge of recognizing the spiritual intentions that an individual brings with her and how these might come to expression. We must not judge students by their appearance or current behavior (or grades); rather, the task is to sense the student’s potential that has not yet manifested.

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Ipsative assessment is, therefore, above all future-orientated (Rawson, 2015). The opportunities for learning and developing are afforded and bounded by the learning culture of the class and school that the individual belongs to. Thus we can understand learning as becoming and as transformation within a learning culture, as defined by the Learning Lives Project (Biesta, et al, 2011).

Research questions that arise from this perspective include clarifying what we, as teachers, actually think learning is because this shapes our attitudes and priorities in teaching. Case studies of individual students have the task of gaining knowledge of individual learning biographies and how they relate to the actual learning culture. We cannot understand individuals as isolated beings, but always in context of the learning community, school culture and life of that person. If we want to understand students’ spiritual intentions, we need to

interact with them and involve them in the process – it is their biography after all! Another area of research involves looking at ways in which learning and development can be supported through assessment (Rawson, 2015). As we know from many studies (see Hattie and Yates, 2014) feedback can be a rich source of support for learning and development, if it is done in the right way. We also need to study the learning culture in the school and faculty, especially looking for tensions between espoused values and those that teachers actually enact, or between school and home, between school and the wider society. The learning culture is powerfully shaped by unconsidered and tacit understandings and relationships that need to be made conscious.

**Proposition 2:** *Learning occurs through participation in learning communities of practice, one of the most important being the Waldorf class. The key to inclusion of people with different learning needs is the willingness of the community to allow and enable participation of all members of the community.*

Participation may be prompted by the urge to imitate, or what is called mimesis (Wulf 2007), but in formal classroom situations this is not automatic. The school and classroom cultures have to generate the

expectation that participation is wanted and permitted and therefore the learning culture has to enable the participation of all children in all learning activities. The key question is always: what do we (as a learning community) have to do, in order to encourage and enable participation? It is not realistic just to expect children to be 'ready to learn' out of themselves. We must meet them where they are and help them to participate in order that they can learn, whatever their developmental stage is. We must help them in healthy ways to become 'ready'. That is the basic principle of inclusion! It has to become part of the learning culture that children have a need and a right to participate and therefore need to be encouraged and enabled to participate. Participation in kindergarten is a different process than that in school, and again there are differences through the grades, and in the high school. Nevertheless, participation is the primary way children, young people (and indeed teachers) learn in a transformational way.

The research tasks associated with this proposition involve identifying the explicit and implicit assumptions in such communities of practice, identifying what enables and what hinders participation, and identifying and understanding the tensions that arise at the boundaries of such communities and where communities overlap. People are always members of several communities of practice: the home, their social environment, membership of other formal and informal communities (e.g., Church groups, Scouts, neighborhood and youth groups). These different communities may have conflicting values and attitudes, different forms of knowledge and expectations. Transitions between communities of pedagogical practice (e.g., from kindergarten to grade 1, from grade 8 to 9 etc.) are often accompanied by crises rich in opportunities for learning and development. One can explore how children actually experience these transitions and what assumptions are made by the adults.

**Proposition 3:** *Learning is the motor of development.*

This proposition asks teachers to look at their assumptions about developmental phases and cross-cultural issues about how children in different cultural contexts

learn and develop. This is a vital topic across the world. The position taken here is that institutional practices, the curriculum, and the school's culture promote certain types of learning that in turn stimulate certain developmental processes. However, it is important to emphasize that learning, as we shall see below, requires that the individual is active. Healthy development occurs when the individual is active in her learning.

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An important research task is to explore how development actually occurs. The developmental ideal types that are described in the Waldorf curriculum and the Waldorf literature are not statements of facts that describe how children actually are, but rather what would be good for them to become. Notions such as the 'Rubicon', which describes a developmental challenge for children around the third and fourth grade, involve establishing

new identities in relation to adults and peers. Children are made able to become conscious of roles, cooperation, social rules and cultural practices through a whole raft of curriculum projects ranging from story material to house building, farming and the relationships expressed by the linguistic structures of nouns, adjectives and verbs and adverbs (who did what to whom, when, where, why and how?). We can research how children actually respond to such tasks and ideas. Development is not something that usually happens quickly but requires a longer time-frame than learning. Therefore, it is important to observe, document, and analyze developmental processes over time. This proposition also asks questions about learning support and seeking to establish which learning activities prompt which specific developmental processes.

**Proposition 4:** *There are a number of important preconditions for sustainable learning.*

In each lesson, the teacher has to help the children to get into a state in which they are open and willing to participate in the first place. One can formulate these conditions briefly, drawing on resilience and sense of coherence research, as follows (each point of course requires greater elaboration):

**Feeling safe** – Children need to feel welcome, at home and safe in the learning situation, both



socially and in their bodies. They need to feel recognized and heard, and they need to be motivated and encouraged by the possibility of learning something new. This helps them learn dispositions to becoming resilient learners, capable of dealing with ambiguity, learning from mistakes, tackling challenges, being patient and trusting in the future.

**Attuning** – Much of the opening part of the lessons in a Waldorf school are dedicated to bringing about an optimal state for learning through attunement. The teacher needs to have a sense for the optimum state of being, in which things flow and the students are a learning group that is both relaxed and alert. The individuals first have to ‘arrive’, connect with their peers and adjust to the classroom learning atmosphere as a community of learners. Their willingness to learn is supported by their being met, welcomed, enabled to participate and feel accepted and embedded in the class community. Doing things together that do not require great personal effort, such as reciting verses and speech exercises, singing songs, carrying out movement exercises, should be relaxing activities that bring a strong feeling of belonging – of being *us* more than being *me*. Attuning the group involves balancing activities that awaken, relax, and harmonize the group. Too much relaxation is not good for new experiences, while too much awareness and attention is tiring. How much time these activities require in order to achieve the optimum state of togetherness and attention will vary from class to class, from day to day. When the teacher has the feeling that the balance of relaxed attention has developed as far as it is likely to, then it is time to move on and make use of this state for the subsequent stages of learning.

**Shared attention** – Joint attention and shared intentionality are important preconditions for communication, cognitive development, and learning (Tomasello, 2008). This is sometimes best achieved when the whole class focuses on the teacher and sometimes when the students are working in groups on their own.

The key question is always: what do we (as a learning community) have to do, in order to encourage and enable participation?

**Rhythm** – The concept of a rhythmical part of the lesson is something of a misnomer, since all teaching needs to involve a rhythm of concentration and relaxation, listening and speaking, watching and doing, being serious and enjoying humor, working alone and working with others, taking in and offering to others, and so on. This is what Steiner refers to in the Foundations (1996b) as the ‘breathing’ process of the soul-spirit and its engagement with the living body. Routine and rhythm throughout the lesson support the processes of embodiment and the other learning processes described below.

**Interruptions** – Feeling safe and at home is one aspect of sustainable learning but the opposite is also needed. People learn when they are interrupted in the regular patterns of behavior, when they are shaken out of their comfort zone of certainty, when they encounter something new, unfamiliar, even alien. Resistance prompts learning because it makes the learner aware of her current position and the need to move to a different position. This includes recognizing both regularities of phenomena and also differences (Marton, 2015). Marton has shown how the more we experience, the more accurately we can describe unfamiliar experiences, not because we have seen the same things before but because we have noticed more possibilities of difference. We learn, in effect, to “discern the particular dimensions of variation” (Marton, 2015, p. 73), and thus we are more likely to be able to deal with entirely novel situations. We notice what is similar in different cases, but – more crucially for learning in a world of rapidly changing conditions – we learn how to ‘read’ unfamiliar situations on the basis of our previous experiences.

In an academic book on Waldorf education, Wolfgang Nieke (2016) offers several maxims for learning that also apply to Waldorf settings. These maxims – in my own formulation with some added references – are:

1. Learning can only occur if what is to be learned is experienced as relevant by the learner. What is retained beyond short-term memory is either, negatively, the outcome of defensive learning or, positively, the outcome of expansive learning. This aspect of relevance and motivation is what

Waldorf theory refers to as educating through the will. The will is understood as the embodied and unconscious intentionality that manifests in intentional movement towards the object of attention. If learning is reduced to extrinsic motivation, then the individual remains unchanged and unwilling to change. This can have catastrophic social consequences later in life.

**2.** Learning makes sense to the learner when it contributes to the development of a dispositional sense of coherence (Antonovsky, 1987). This disposition is learned through regular experiences that the conditions of learning and the challenges and demands made on the learner are comprehensible, that change is possible and manageable, and that learning enables the person to construct meaningful structures in her own existence in relation to the wider social context. An important aspect of coherence is the function of feedback in a classroom culture in which it is acceptable to make mistakes and then learn from them.

Working through mistakes often makes the situation more comprehensible because it raises consciousness of the context and valorizes its learning value. Indeed, as Hattie and Yates (2014) remark, feedback thrives in an environment where errors are welcome and “when teachers themselves are prepared to adapt and adjust their methods and priorities” (Hattie & Yates, 2014, p. 55).

**3.** Learning makes sense to the learner when new experiences can be integrated into existing structures in the form of three kinds of knowledge that provide a basis for action: orientation knowledge, knowledge of the conditions of action, and knowledge how to adapt to a given situation – all of which are enhanced by skilled feedback.

**4.** Learning leads to successful coping in the world based on embodied dispositions.

**5.** Learning constitutes the learner. Through learning we become who we see ourselves as and how people see us; in other words, learning forms identities.

The research issues that arise from these propositions about the pre-conditions of learning are almost endless. Perhaps one of the most fruitful places to start is the model of sense of coherence. Teachers can ask what indicators there are in classroom practices that students have the feeling that what they are being taught is comprehensible, manageable, and personally meaningful to them. These criteria can then be used in lesson planning. Another important research question is how children can be brought into an optimal state of receptivity for learning to occur. In the Main Lesson, a large part of the lesson (often referred to as the rhythmical part) is devoted to optimizing learning conditions. How are the components actually experienced by the pupils and what indicators are there for this?

**Proposition 5:** *The learning process is performative and aesthetic.*

The learning process occurs in structured environments in which the learners can participate through doing and not merely being receptive. Being performative means that the learner incrementally learns in

individual ways through activities and is transformed in the process. Through performance the learner comes progressively to more comprehensive understandings, thus constructing meaning, knowledge, and identity (Zirfas, 2014). The process is aesthetic because the teaching is an art (Lutzker, 2007), which means that learning situations are created in which form, content, and activity become a unique holistic experience through which the learners are transformed and become (Eisner, 2014).

The developmental ideal types that are described in the Waldorf curriculum and the Waldorf literature are not statements of facts that describe how children actually are, but rather what would be good for them to become.

A research task could be to explore how teachers understand and facilitate the task of creating aesthetic lessons and how they understand and practice the performative aspect of learning.

**Proposition 6:** *The basis for learning is rich experience through participation in social practices. The participation can be literal and direct or through narrative.*

Learning begins with rich sense experience through listening, observing, and participating. ‘Rich’ means that experience is direct, authentic, and multi-sensory. This can occur through active participation in a social practice or through active imagination (e.g. prompted

by the teacher's narrative or other media). Narrative is a central method in the Waldorf approach because it engages the child's imagination, structures the content by giving it meaning, can appeal to different learning types, and mediates cultural understandings.

In both of these experiences the teacher plays a central role in selecting the experience, shaping how the children will encounter it, and steering and monitoring the learning process. The act of selection and preparation is in itself a vital process because the teacher chooses the context, sets priorities, frames the learning situation, takes the children's needs and abilities into account – in other words, determines the what and how of learning. The teacher does not simply use existing learning models and lesson plans but constructs these in ways that reveal the signature of her own learning process and subjectivity. Each teacher does this in individual, personal ways. In this way the teacher also forms a personal relationship to the material – it *matters* to her. By engaging and re-engaging with a theme or a phenomenon, the teacher develops and expands her intentional interest in it. This interest and meaning communicates to the learners.

The teacher in the class teacher period exemplifies the learning process as a social practice (i.e. how we learn about the world and ourselves) and invites the children to participate in the practice of learning across the range of subjects. Expertise in the subject is not the primary precondition, but rather the teacher's personal engagement with the learning process and how this is mediated. From the material available on each topic, the teacher selects those aspects that she thinks are most likely to stimulate learning and prompt development. Each subject discipline offers a different way of seeing the world and engaging with it. Therefore, in the upper school, the teacher mediates the particular view of the world that is inherent in the subject discipline (i.e. understanding the world historically, chemically, through the arts, etc.). The subject and its techniques become the 'teacher', though this is mediated by the teacher's expertise in the practice of being a geographer, a sculptor, or mathematician.

In the typical Waldorf class, the class itself is a community of practice or community of learners. This includes

the activities of teachers and pupils. The way the teachers generate knowledge and construct learning arrangements (the craft of pedagogy) and how this is done in the situation (the art of pedagogy) is a practice that children participate in. Indeed, in the steps that follow, we can see that children increasingly take ownership of this process through recalling, reflecting, and conceptualizing their experiences. Both teachers and older students can even contribute to the science of pedagogy by starting to learn about learning.

Participation means closely observing and taking part in an activity. Barbara Rogoff (2014) has described this form of learning as cultural apprenticeship, which involves guided participation and eventually appropriation

**People [also] learn when they are interrupted in the regular patterns of behavior, when they are shaken out of their comfort zone of certainty, when they encounter something new, unfamiliar, even alien.**

of the practice. Appropriation means making an activity your own. It becomes something you can do and you are changed by being able to do it. This way of understanding learning goes beyond the distinction between formal and informal learning. Learning is often described as ubiquitous – what people do everywhere. This is true to some extent. However, as Vygotsky (1981) argued, children can learn natural concepts in life through participation and observation,

but complex, abstract, and scientific concepts have to be formally taught. Following Michael Eraut (2000), formal learning means that a specific planned learning situation is created with learning outcomes, instruction, and assessment. In reality, children learn formally (from the teacher and structured lessons) and informally (by doing, by watching others, by being told by their peers what is important to notice). Therefore, we need a balance of formal, focused, structured learning, but we also need to recognize that students can and do learn from each other.

In order for learning in the full sense of the word to make sense, however, it has to be intentional, which does not necessarily mean it has to be conscious. My will is unconscious and intentional. Imitation that leads to the learning of complex skills, however, is always intentional and involves at some stage an understanding of what one is doing, or why one wants to do it. Simply copying an activity is not imitation in this sense. Perhaps emulation would be a better word for intentional imitation, because the learners not only want to do something like the role model

they are imitating, but they want to be like that person. In other words, they want to emulate what she does and, to some extent, who she is. Imitation starts as an unconscious process of embodying actions that we see other people doing. Through play, practice, or experimentation, we appropriate the activity, which becomes part of us bodily as a disposition or skill. It shapes the way we feel about the activity. It enables us to identify with the practice, and it may even prompt us to do something creative and original with it. Once I can knit – once I have become a knitter and a member of the community of knitters – I want to design and knit my own garments and not simply do what my teacher has shown me. The same applies to writing stories, playing music, doing math, reading literature, making friends, and so on.

The learning culture in a class (and perhaps in the whole school, if the teachers share their vision) is created by what people do and say, what they believe in, what they value, and the ideas that inform what they do. Most of this is not consciously known to the learners but the effect it has on learning attitudes and behavior is very real. If the learning culture encourages children to participate, even if they get things ‘wrong’ at first, it is more likely to encourage learning from mistakes. Thus pupils become disposed to seeking mistakes as opportunities for learning rather than as signs of failure. If learning is focused on testing and grades, then this will shape the reasons why students learn.

The core research questions, from this perspective, include: What constitutes the practice? What enables and what hinders participation? What happens at the boundaries of communities of practice? While the quality of participation by children and young people is something that could be empirically established by observing willingness to participate and by assessing the opportunities and conditions for participation, using, for example, the criteria suggested by Rogoff, capturing evidence of the transformation of formative processes is more challenging, though not impossible. One can observe how children respond to experiences, whether this flows into bodily action and responses, in play or imitation for example, or whether they ‘interpret’ such experiences in pictures or texts in individual ways. As Loebell (2016, p. 406) suggests, in puberty one can experience how youngsters make the

step from ‘having’ imaginative images based on their experiences to ‘constructing thoughts’ about them.

### One research task here is to document through self-observation how we approach new topics and how we revisit old interests.

**Proposition 7:** *Forgetting is an unseen but important part of learning.*

The quality of forgetting depends on the quality of the original experience and the quality of the experience depends on the intentions of the teacher and the meaningfulness of what has been experienced. We can see

this most clearly when children see a craftswoman at work. What they experience is not only what they can see, hear, smell, and feel but also the lived values in the activity, the attitude and identification of the person with her work and craft, its materials and the needs it is responding to. Craftwork is embedded in a set of cultural meanings that have a history. In the unconscious state, during sleep, the child experiences all these dimension directly, at the level of the will. Something similar occurs when the teacher tells the class about something or shows them how to do it. In doing so, she communicates her interest, enthusiasm, and questions, and she acts out of a lively engagement with the topic. This is what the children unconsciously pick up on alongside the actual things told or shown.

When students witness or hear about meaningful things, when the instructor or teacher is herself immersed in the activity, a sense of coherence and meaning to is mediated to the students. When their consciousness is directed elsewhere, or when they are asleep, they find that they are already connected both to the person and the experience. This helps them form an inner connection – in reality they are already connected with the world. The teacher, however, draws attention to this connection, emphasizes it, structures it. This helps them draw strength and inspiration from this spiritual connection in the unconscious realm, in which we are not separated from the world but already participate in it. The teacher’s intentions act as signals to the students’ spiritual being, directing them to what is important. Gerd Biesta (2013) calls this the gift of teaching. He argues that human beings develop and grow, not simply by learning but by being taught something by someone. Thus, the quality of the teacher’s preparation and relationship to the material is decisive in directing the children’s interest to what is taught.

Steiner's idea is that life processes shape the way each sense modality mediates our experience of the world, for the basic reason that they *are* the world. The life processes that enliven our bodies are the same organizing forces at work in the world. Their source is the living world. They shape the way our sense organs develop and the experiences we have through this process, shape our thinking, feeling and willing. Our sense organs mediate being in the world to our mind. Thus from an anthroposophical, Waldorf theory perspective, the richer the primary experience, the more we can form a relationship to a phenomenon. As complex beings ourselves, we are disposed to identify with complexity and thus we expect complexity in other living beings. If our seeing is richly imbued with meanings, we will experience the world in greater depth. In forgetting, we connect and form a relationship to what we have experienced with our embodied experiences.

One research task here is to document through self-observation how we approach new topics and how we revisit old interests. We need to critically interrogate our motivations and interests. We then need to bring this into relationship with the children's learning, which we can witness in the following steps. We cannot research what happens to us in the unconscious, or indeed what the children do in their sleeping state with the experiences they have. We can only do this by monitoring closely how the next learning steps unfold.

**Proposition 8:** *Learning is enhanced by structured and systematic recall.*

In order for learning to continue as a transformative process, we need to recall our experiences. The teacher prompts the pupils – using the art of asking questions – to recall the relevant experiences from the previous lesson or learning situation. The experiences the pupils had 'forgotten' and now recall have been modified in the unconscious, and each person will have an individual version of the original experience. The recalled experience is a new perception, though its source is internal.

If learning is ultimately about the development of the person, this stage of individual recall is important. It should certainly not be a stressful experience, like a test, and it should be entirely open regarding

In order for learning in the full sense of the word to make sense, however, it has to be intentional, which does not necessarily mean it has to be conscious.

what 'should' be recalled. Correction comes later. If the pupil has the feeling that the teacher expects certain specific answers, this will limit what is actually recalled. Nor is it merely a pragmatic process of establishing a link to what now follows, but rather an individual process of identification and relating. Correction or feedback is offered in terms of the collective process. The learning process requires each individual to enact the recall.

The second stage of recall involves experiencing what the other members of the class recall and noticing the interesting differences. Comparing and discussing memories, which are always selective and partial (and may even be inaccurate), enables us to re-construct a shared recollection, which can be contextualized, i.e., linked to what it belongs to in the wider picture.

This will be richer than what the individual alone recalls. The shared recollection leads us to the next stage of learning. It also shows the teacher what the pupils actually experienced, which helps in the preparation of the next lesson. It is interesting to observe how some children's understanding remains embedded in the distributed memory of the class situation longer than others. In the foreign language lesson, individual children may be able to say more and understand more in the target language when they are in the language lesson, than if someone at home asks them what something means. A considerable amount of learning remains situated before it becomes individualized. The collective recall reinforces distributed learning and knowing.

The third stage of recall involves the co-construction of concepts. Once the memories have been recollected and shared, a process of collaborative reflection follows in which details are clarified and the original experience contextualized, identified, and named. Perhaps the phenomenon shows some regularity or pattern that can now be identified as a rule, perhaps it differs from what was expected. Waldorf learning theory makes the assumption that when children formulate their own rules and concepts, they are more likely to understand them. If children have been looking at dandelions, now comes the moment the children can formulate what is common to all the dandelions that were seen or described. Thus, the children can characterize the dandelion as a species, not necessarily using botanical terms but as accurate

description (deep tap root, tooth-like leaf-form, central sap filled stalk, bright yellow flowers with regular thin petals like rays, etc.). From individual attempts a collective characterization can be negotiated. From concepts that are collective to the class, one can move on to general concepts.

At some point in the learning process, each individual has the experience that what she has learned not only makes sense but really is so and that this is important. Peter Loebell (2000) calls this an experience of something being self-evident. The process begins with noticing something in the world; it continues with the learner forming a connection to the topic or task and engaging with it in an expansive way (i.e. not just because the teachers says she has to). This second stage of commitment can be collective, in the sense of “we think it is important to engage with...”. The final stage is the experience that what has been learned has to do with *me*, that knowing it changes *me*. This may happen at almost any stage of learning, though the phase of recall and of forming a concept is a common stage for such personal connection to happen. The collective moment of “we” is very important, but the individual moment of “that is important to me personally” embeds the learning into our being. It is, therefore, all the more important that we enable all children, whatever their level of access and ability, to discover something that means something personal to each one.

If I look at my own learning, the things I never learned were those that I found no relationship to and was (in my experience) prevented from accessing through inadequate teaching (which is the main reason I became and remain a Waldorf teacher).

**Steiner’s idea is that life processes shape the way each sense modality mediates our experience of the world, for the basic reason that they *are* the world.**

From a research perspective, this proposition prompts a range of research questions: How do children recall different kinds of experience? This is a very wide field of inquiry since there are so many aspects to recalling and forming living concepts. What kind of prompting generates what kind of recall? Is there a difference between non-verbal and verbal recall? How does the sharing process occur? How are concepts or characterizations arrived at in different subjects with different age groups? How does recall work in different subjects (e.g. handwork, music, foreign languages)? In the upper school, how does the process of co-constructed concepts relate to existing scientific laws and generalizations? How do pupils record this process? What

assessment criteria can we develop for the whole process of recall?

**Proposition 8: Practicing.**

Applying what was learned in varying ways and in different situations through practice (written or spoken) leads to the ability to apply new knowledge and skills. Practice involves repetition with variation of the processes above, with increasing opportunities for the learners to experiment and ‘play’ with the new idea or process. It also means improving what was done and engaging with mistakes while learning from them. At this stage the teacher has to make provisions for the individual students’ different levels of skill and ability to participate. This means that teachers have to differentiate the tasks in a class. Tasks can be given at three levels (to simplify). Firstly, that of reproducing what has been learned; secondly, relating what was learned to other phenomena already known; and, thirdly, employing open and creative tasks. These can be done in groups in which each person has an active role. This is obviously the longest part of the learning process and may involve several cycles over months and years, in which the first three stages are repeated and further practiced, depending on the knowledge or skill involved. Repeated practice enables the learner to learn and embody new dispositions, which in turn

change the person. Learning through repeated practice involves practicing in order to better understand what and how to do the task and how to understand the phenomenon better. Practicing also means learning consciously from mistakes and from reflection on practice. Learners need to be given helpful, concrete feedback from teachers about what they can

do to become more proficient. Thus, formative and ipsative assessment support the learning process at all stages but particularly at the ‘growing ability’ stage. In short, assessment for learning is a precondition for learning through practice (Rawson, 2015).

Research issues based on this proposition might involve exploring ways in which learning situations could be created that afford practice in authentic settings, in which knowledge and skills can be applied to engage with real or realistic tasks. It would also be interesting to explore how pupils themselves can contribute to practice, so that not all activities and explorations are

teacher led. The value of group work and of projects could be investigated from the perspective of practice.

**Proposition 9: Growing ability.**

Through practice we gradually grow abilities, which are retained in the form of dispositions, habits, skills, and ways of seeing. In certain situations, we can now do certain things without having to think about them because we are disposed to doing them. Ability, once developed, does not need props (or scaffolding) to help – either we can do it or we can't (yet) do it. The transition from practicing to being able to do something involves a process of scaffolding, in which the teacher helps the pupils to achieve a certain function that stretches their ability to another level. Technically this is known as the zone of proximal development (Vygotsky, 1981; Wells, 2008). I take the view that skills can't be transferred as competences, as is frequently suggested, because skill and the ability to practice it is situated. However, embodied disposition can be activated in new situations to enable us to quickly learn to engage with the new situation. The ability to perform a skill has to be adapted to each new situation. Experienced people can do this relatively quickly. Ability, as Ole Dreier (2008) suggests, is not just an attribute of an individual person; it also depends on the social and cultural context in which it is expressed (a person's good communications skills could be realized only when his or her partners in communication can cooperate and be responsive). We can at best speak about potential abilities.

Research tasks based on this proposition could involve issues of assessment and how abilities and dispositions can be made visible. Current standardized methods of assessing and measuring learning are knowledge-based and depend on artificial test situations. It would be helpful to research ways in which abilities can be assessed in context, including in the context of teamwork and collaborative projects. Once people are able and skilled, the biographical questions of what they can do with what they have learned in school arise. The whole area of biographical development and orientation is a field that would require research in Waldorf settings.

**Proposition 10: Learning is transformation.**

Once we are able to do something new, we have transformed. We have become new people. Of course, we should remember that this transformation occurs on the backdrop of one of our primary dispositions – the

ability to generate continuity of identity across social practices, situations, and time. Everything we learn with our whole being changes the way we are and changes our relationship with the world. Real learning opens us up to new learning because it makes new learning more likely and possible. It gives our learning direction and it becomes expansive. The direction we give our learning becomes increasingly individualized as we emancipate ourselves from collective ways of being. If the learning we do only remains in our cognition, then it is not a truly embodied ability and thus can be lost. What has become part of us – body, soul, and spirit – does not get lost. Real learning takes time but is sustainable.

## Conclusion

This is just one way of looking at learning situations in Waldorf practice. Obviously there are others, not least of which is the application of learning theory to different subjects, age groups, and activities. My purpose here is to prompt discussion and practice-based research. Pedagogy, we should not forget, has to be a science by using theory-based systematic inquiry. Thus, I, myself, would be more than happy to receive feedback, critique, and suggestions on the work in progress presented in these pages.

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