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# "Education Towards Freedom" – an Introduction to Waldorf Perspectives on Learning and Development

## *„Edukacja ku wolności" – wprowadzenie do waldorfskiej perspektywy uczenia się i rozwoju*

**Abstract:** In the following paper, the author mainly describes what could be called the Waldorf education's development didactics. This didactical approach is based on Rudolf Steiner's idea of human development through seven-year periods. In Steiner's time, this idea, which dates back to the ancient division of human life into *heptomade*, was, to some extent, still in use. In today's developmental psychological discourse, the idea of the seven-year periods is virtually absent. One finds the term in the Waldorf pedagogical curricula and literature, but otherwise not. Steiner's interpretation of the child's development through the first three seven-year periods had a clear influence on the curricula and the didactics of the Waldorf school. There are given some examples of this below. In the first part, the author focuses on the concepts of imitation, rhythm, and play. In the second part, there are considered the life processes, imagination, and the arts. In the third part, the focus is on cognitive development, the development of complex emotions such as shame and guilt, and the development of autonomy. The author will also take a closer look at the ways in which the ideas on learning and development, emphasized by Steiner over a hundred years ago, could be seen in the light of recent research, especially in neuroscience.

**Keywords:** Waldorf education; imitation; imagination; independent thinking; development; learning

**Abstrakt:** W artykule opisano głównie to, co można nazwać dydaktyką rozwoju oświaty waldorfskiej. To podejście dydaktyczne opiera się na idei rozwoju człowieka przez okresy siedmioletnie Rudolfa Steinera. W czasach Steinera idea ta, wywodząca się ze starożytnego podziału ludzkiego życia na *heptomade*, była do pewnego stopnia nadal w użyciu. We współczesnym rozwojowym dyskursie psychologicznym idea siedmioletnich okresów jest jednak praktycznie nieobecna. Termin ten znajduje się w programach i w literaturze pedagogicznej Waldorfa, ale poza tym nigdzie nie funkcjonuje. Interpretacja Steinera dotycząca rozwoju dziecka przez pierwsze trzy siedmioletnie okresy miała wyraźny wpływ na programy i dydaktykę szkoły waldorfskiej. W opracowaniu podano kilka

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przykładów. W części pierwszej skupiono się na pojęciach imitacji, rytmu i zabawy. W części drugiej omówiono procesy życiowe, wyobraźnię i sztukę. W części trzeciej skoncentrowano się na rozwoju poznawczym, rozwoju złożonych emocji (takich jak wstyd i poczucie winy) i rozwoju autonomii. Przyjrzano się również bliżej temu, w jaki sposób idee dotyczące uczenia się i rozwoju, które Steiner podkreślał ponad sto lat temu, można postrzegać w świetle ostatnich badań, zwłaszcza w neuronauce.

**Słowa kluczowe:** edukacja waldorfska; naśladownictwo; wyobraźnia; samodzielne myślenie; rozwój; uczenie się

To face a child in development means to stand in front of the world's greatest mystery.
Rudolf Steiner in a lecture in Oslo, Norway, 1923

## BACKGROUND

In June 2022, my workplace, Rudolf Steiner University College in Oslo, had a visit from the University of Maria Curie-Skłodowska in Lublin. In connection with this visit, I gave a lecture in which I introduced some Waldorf perspectives on learning and development. Afterwards, I was encouraged by our guests to turn the lecture into an article. The text that follows is a result of this work.

The article is written as a descriptive presentation of some elementary aspects of the Waldorf schools' views on learning and development.[1] I will mainly describe what could be called the Waldorf education's development didactics. This didactical approach is based on Rudolf Steiner's idea of human development through seven-year periods. In Steiner's time, this idea, which dates back to the ancient division of human life into *heptomade*, was, to some extent, still present (Wagemann, 2017, p. 16). In today's developmental psychological discourse, the idea of the seven-year periods is virtually absent outside of the Waldorf pedagogical curricula and literature.[2]

In the cultural life of Central Europe in the 1880s and 1890s, Rudolf Steiner (1861–1925) was mainly a writer and philosopher, as well as a renowned Goethe researcher. He later developed anthroposophy, a philosophy based on spirituality and esotericism, which became the driving force behind a number of socio-cultural initiatives and activities in art, architecture, medicine, agriculture and pedagogy. Waldorf pedagogy was founded in Stuttgart, Germany, in 1919.

Steiner's interpretation of children's development through the first three seven-year periods had a clear influence on the curricula and didactics of the Waldorf

[1] For a more critical and problematizing approach to the topic, I recommend (Schieren, 2016). In addition to a comprehensive review of basic concepts in Waldorf pedagogy, the book contains an investigation and discussion of anthroposophy, which is the ideological basis of Waldorf pedagogy.

[2] For a broader discussion on the current state of research on the seven-year periods, see (Loebell, 2016).

school. I will give some examples of this below. In part 1, I will focus on the concepts of imitation, rhythm, and play.[3] In part 2, I will consider the life processes, imagination, and the arts. In part 3, I will focus on cognitive development, the development of complex emotions such as shame and guilt, and the development of autonomy. I will also take a closer look at the ways in which Steiner's ideas on learning and development can be seen in the light of recent research on topics such as neuroscience.[4]

## PART 1. THE FIRST SEVEN-YEAR PERIOD

### Imitation

The concept of imitation has many layers. In this article I narrow it down to what the development and comparative psychologist Michael Tomasello describes as "imitation-learning": "Imitation learning is made possible by a form of social cognition, namely the ability of individual organisms to understand their conspecifics as beings like themselves who have intentional and mental lives like their own" (Tomasello, in Wiehl, 2015, p. 172). This means that it is possible for the individual to familiarize themselves with the mental world of another person, "so that it not only learns *from* others, but also *through* others. The notion that the others are intentional beings equal to oneself are crucial to human cultural learning" (p. 173).

According to Steiner, the child's life up to the age of 7 consists of a continuous imitation of what takes place in the surroundings. When the child observes, senses or takes in something from the surroundings, "a deep need to imitate in an intense, inner gesture, appears". Steiner claims that children are wholly sense-organ, and react to all the impressions of the people around them. Therefore, he says,

> the essential thing is not to think that children [in an abstract way] can learn what is good or bad, that they can learn [by being told] this or that, but to know that everything that is done in their presence is transformed in their childish organisms into spirit, soul, and body. The health of children for their whole life depends on how you conduct yourself in their presence. (Steiner, in Sundt, 2015, p. 28)

[3] In the lecture I gave to my Polish colleagues, I gave particular emphasis on early childhood education, and accordingly spent a lot of time on the first seven-year period. I maintain this emphasis here, not only because it thematically fits into a journal that is concerned with early education, but also because what unfolds in the early childhood period has such a crucial significance for later life stages.

[4] The literature in this article is taken from Rudolf Steiner's collected works, from Waldorf pedagogical literature and from recent research literature. All translations from Norwegian and German to English are done by me.

This perspective clearly points at the need for the educator to be aware of both his effects on the child and how the child's surroundings are formed. According to Steiner, young children have "a devotion to the world that they never will have in the same degree later in life". For this reason, Steiner continues, the educator must be aware that the child, by its nature, becomes one with the outside world and with the person or people around it (Steiner, 1978, p. 17). In the Waldorf kindergarten, emphasis is accordingly placed on the educator as a role model and the intention to create an atmosphere and an environment that in a healthy and good way appeals to the senses. The emphasis on children's sensory experience is evident even in the physical surroundings of Waldorf kindergartens, such as the interior, the architecture and the outdoors area. When discussing health, architecture is usually not the first thing that comes to mind. However, according to an article in *The Guardian*, it influences us in profound ways: "Architects play a critical role in shaping the qualities of our environment […] and they have the power to restore and promote solidarity, mental and physical health and be a source of happiness" (Johnson, 2013).

## Play and rhythm

When conceiving his pedagogy, Steiner was inspired by the poet and philosopher Friedrich Schiller. In one of his books about aesthetics, Schiller claims that the human being is only free when he plays. Schiller, as well as Steiner, connects the activity in play with artistic work (Stabel, 2013, p. 313, 314). Play and art are important elements in both Waldorf kindergartens and Waldorf schools. According to Steiner, teachers should avoid intellectual ideas of learning outcome when setting up children's play. We have, he claims, "conceived all sorts of games for the children in kindergarten based on the intellectualistic considerations of the adults, which are actually thought up by the adults". To play, Steiner continues, is "a serious business"; children's play is a precursor to the adult's professional work, and a decisive part of learning by imitation. Therefore, it is "the task of the kindergarten to bring the chores of life into such forms that they can flow from the child's activities into play" (Steiner, 1989, p. 77).

When small children are playing, a devotion to the world is evident, and they learn to take part in experiences and change them into something relatable. According to the Waldorf trainer teacher Ernst Michael Kranich (2003), when children play, they develop those faculties that imbue all learning and all work with the most complete and human sense of meaning:

> The children learn to fully connect with what they do, to exert themselves in their activities, and to improve them. In the play they permeate their wilful activity with meaningful

> content, imagination, intelligence and joy (...) The play is the work "the employment" that makes all the child's ability to interact in the most complete way. (Kranich, 2003, p. 92, 93)

According to the Waldorf teacher Meaghan McKenna, the Waldorf approach to early childhood years "focuses on imaginative play and supporting the child while laying the foundations for future academic excellence" (McKenna, 2014, p. 9). Play, she continues, "is *required* in order for children to develop capacities of memory thought comprehension, and a relationship with time and space" (p. 16). The idea in Waldorf kindergarten pedagogy is that through play, especially so-called free play, children are allowed to create a play-environment of their own that supports their emotional and cognitive development.

This perspective on play can be found in contemporary research. The brain neurologist Per Brodal writes that "play is the children's preferred form of learning". Play always contains "a number of different aspects – initiative, creativity, self-control, thinking (...) and emotion regulation". It is, therefore, "reasonable to assume that play is by far the most effective way to stimulate coordination and integration of various specialized brain networks". We know from psychological research "that stress inhibits questioning and exploratory behavior". The opposite is the case with play. Play "is characterized by a low level of stress. The learning door is wide open" (Brodal, 2019, p. 29, 30).

Another key concept in preschool Waldorf-education is rhythm. Steiner claims that children, both in kindergarten and in primary school, should engage in different forms of rhythm, whether it be the rhythm of the day, the seasons of the year, rhythms in song, recitation or the forming of a lesson. The point Steiner makes is that when you appeal to the rhythmic element in the teaching, it will resonate with children's organic rhythm-system. And this rhythm-system, in contrast to abstract teaching, "does not tire the children" (Steiner, 1978, p. 87).

An obvious example of a rhythmical element in teaching is music. According to the neuroscientist Kjeld Fredens, music, among other things, activates the brain and "enlightens our analytical and rational recognition". It further "stimulates the language rhythm and the linguistic syntax" (Fredens, in Carlsson, 2018, p. 69, 77). Steiner, on his part, regards music as an element that should permeate the entire teaching. He claims that children in kindergarten and primary school should not only be met with explanations. Teachers should rather "paint with words and ideas" by bringing "rhythm into the whole way how to teach". The musical element has to be there "in the whole action of the lesson. If time, rhythm, and even an inner musical element can prevail in the lesson, then the child will receive a fine understanding of what is being taught" (Steiner, 1989, p. 97).

## Embodiment and neuroplasticity

Embodied cognition and the plasticity of the brain (neuroplasticity) are relativity new concepts. Fredens stresses that thinking is not something that only takes place in the brain. On the contrary, thinking is an interaction between the brain, the body and the outside world, where one's actions have a formative effect on the brain. The brain and the body are in a mutual relationship. In his latest book, he expresses it as follows: "Cognition is not only a brain product, but must be explained as an interaction between the brain, body and the outside world" (Fredens, 2019, p. 24).

A hundred years ago, Steiner was thinking along the same lines, using different terms. In a public presentation of Waldorf pedagogy in Norway in 1921, he talks about the connection between bodily movement and cognitive development, claiming that when the child is moving in eurythmy[5] "it [stimulates] the intelligence" and "has a healthy effect on the whole human being" (Steiner, 2008, p. 40). Steiner also emphasized that not only girls, but also boys should learn to knit, because by knitting the ground is laid for a "healthy thinking" and a "healthy logic". Furthermore, he claimed that when the child is knitting or crocheting "it flows up in the head" and much that comes from "the grip of the knitting needle and threading needles leads to the development of a logical thinking". Steiner admits that it may sound paradoxical, but he nevertheless claims that "wrong thinking does not always have its cause in the intellect. What in mature age appears as intelligence, has its origin in the whole human being. Above all, one must be aware that practical activity is not only the fruit of a culture of understanding, but also acts back on it" (Steiner, 2008, p. 43).

If we move from embodied cognition to the forming of the brain, Steiner is – as far as I can see – one of the first to use the term the "plasticity of the brain". When a child learns to walk, he says, all "the stamping, crawling and walking from the limbs acts back on the whole organism (...) The brain changes when the child learns to walk. In a sense, the whole process is depicted in the brain. As the human being learns to walk, the brain is transformed from the periphery, from the limbs and towards the centre into an organ of the human will" (Steiner, 2008, p. 23). And he adds that we must not exaggerate the importance of the brain and the nerve system in itself, but understand it in connection to "the movements of the body and everything the child does, and how the nervous system and then preferably the brain is affected by it". Therefore, Steiner continues, "it is not a paradox when anthroposophical human knowledge claims that the child's mind and judgment are best developed by letting it do the right movements at an early age" (p. 38).

[5] Eurythmy was initiated by Steiner as performing art in 1913, but later it has also been applied pedagogically in Waldorf kindergartens and schools.

"Just as the footprints are imprinted from outside", Steiner says in a lecture in 1923, "so are those things imprinted on the body, especially on the brain and the nervous system, which are experienced from the environment in imitative life when learning to walk, to speak, to think" (Steiner, 1989, p. 45). Steiner agrees with psychology that "the brain is a clear imprint of the soul-life in the human being", but he underlines that the brain is not the producer of the soul-life, "but rather the soil on which the soul develops. Just as little as I can walk without ground under my feet, just as little can I think as an earthly person without a brain". So, according to Steiner, the brain is merely the medium through which thought and speech configures the experience of reality.

Such ideas occur in more contemporary science. The neuroscientist Manfred Spitzer writes that "learning is not a process that the brain needs to manage in addition to perception, thinking and feeling, but instead occurs automatically whenever the brain is perceiving, thinking or feeling" (Spitzer, 2006, p. 50). The neuroscientist Audrey van der Meer, underlines the importance of embodiment as the ultimate learning-element, especially in early childhood. "Studies show", she writes, "that rats raised in cages have minor ramifications in the brain than rats raised in an environment with climbing and hiding places and tunnels". She adds that the nerve cells in young children's brains quickly become more and more specialized as the baby learns new skills and becomes more mobile: "the brains of young children are very malleable, and can therefore adapt to what is happening around them" (van der Meer, in Wolden, 2016).

To summarize: The view of development and learning described so far significantly affects the didactics of the Waldorf kindergarten. In early childhood, the ability to imitate is essential for upbringing and learning. Emphasis is placed on sensory stimulation, movement, play, human attachment and other primary forms of experience. This vital, bodily unfoldment has a fundamental significance for mental development. As the Waldorf training teacher Arve Mathisen expresses: "The pedagogy in the first phase of life is aimed at action and experience. The basic idea is that the child should meet and get to know the world's phenomena through their own activity" (Mathisen, 2021, p. 29).

## PART 2. THE SECOND SEVEN-YEAR PERIOD

Using the framework of the Waldorf approach to development, one could say that the experiences of the first seven-year period form a basis for the experiential and emotional engagement of the second seven-year period. According to Steiner, emotional engagement stimulates the rhythmic activity of the organism. Throughout the next seven-year phase, the Waldorf pedagogy therefore seeks to address

and support "life-giving processes" in children. This is done by emphasizing an artistic and a consciously constructed form of rhythmic teaching. According to Mathisen (2021), the entire timetable, as well as each individual teaching session, is designed so as to facilitate a rhythmic form of teaching. Theoretical subjects and artistic subjects are, therefore, combined in order to create a holistic and varied daily and weekly rhythm. With Mathisen's words: "Calmness and movement, seriousness and humor, musical and formal elements seek to create lushness and commitment in each individual lesson" (p. 33).

Just as "imitation" was a keyword in the first seven-year period, "imagination" becomes central in primary school.[6] Here, the teacher should, according to Steiner (1978), "educate out of the very essence of imagination". The quality that turns a child under seven so wholly into a sense-organ now becomes an inward quality; it enters the soul life. According to Steiner, "children, especially at the age between the change of teeth and puberty, are most sensitive as to whether the teacher are governed by imagination or intellect". He then quite sharply claims that "intellectuality creates a desert in the soul of the child, imagination makes it flourish" (Steiner, 1978, p. 31).

In the same way that bodily experience in kindergarten lays the ground for learning in primary school, a pictorial and imaginative teaching in primary school will facilitate a well-developed cognition in pre-puberty and puberty. Steiner claims that a vivid pictorial and imaginative teaching and thinking lays an optimal foundation for later abstract thought. He warns the teacher about the tendency to give pupils what he calls "dead concepts". Steiner explains dead concepts by analogy: "it is just as though I bought the child a pair of shoes at the age of three, and each successive year had shoes made of the same size. The child will grow out of them". We cannot keep "the child's feet small enough to go on wearing the same sized shoes", but in a metaphorical way this is what we do "when the teacher furnishes the child with ideas that do not grow with the person". Teachers must avoid "[worrying] the child with fixed, unchangeable concepts"; instead, they must give "the child concepts capable of expansion" (Steiner, 2008, p. 33).

Steiner (1989) emphasizes that children's thought activity must be understood not as logical, but as pictorial: "by its inner nature the child rejects the logical at first; it wants something pictorial (…) above all [we must] pour this pictorial element into everything (…)". He also says that the imaginative teaching through rhythm and art strengthens the memory.[7] To be able to work in this way as a teacher, one

[6] As with "imitation", the term "imagination" has many layers. In the German language Steiner used there are qualitative differences between the terms *Imagination*, *Phantasie* and *Vorstellen*, though they all belong to the same didactic toolbox.

[7] The "development of the memory" is also an important keyword for Waldorf education in the second seven-year period. The limited scope of this article does not allow for extended treatment of this concept.

must have, what Steiner calls, a "natural authority" [*selbstverständliche Autorität*] (Steiner, 1989, p. 57, 58, 60). This means that the Waldorf teacher must teach in an artistic way. To become a natural authority, "you shall educate the child's heart and not just his mind". Steiner claims that all upbringing is self-upbringing; therefore, if the teacher wants to appeal to the imaginary forces in the child, he must develop those forces himself: "It is really a question of being able, as a teacher, to create the right pictorial ideas for oneself, which can lead one through the delicate transitions that exist in the child at this particular period of life" (Steiner, 1989, p. 95).

A hundred years later, aforementioned neuroscientist Kjeld Fredens concludes with something similar in his research. He writes that abstract thought is based on metaphors; pictorial-poetic thought. In a reflection on what he calls "the poetics of the mind", he writes that "poetry comes before facts", and he underlines that "a brain without imagination gives us lifeless knowledge (…) Poetry is a prerequisite for understanding fact-based abstract knowledge and for being able to think (…) with creativity" (Fredens, 2019, p. 232, 233).

To summarize: During the primary school years, the phenomena of the world appears in Waldorf school's curriculum in such a way that the teaching can encourage the pupil's experiential involvement and the development of imagination and memory. This is done through a teaching that is driven by art. In an emotionally inclusive and artistically designed teaching, children learn about numbers and letters, about animals, plants, people and minerals (Mathisen, 2021). Steiner underlines that pedagogy is primarily not a science, but an art. The didactics of the Waldorf schools – in the years leading to puberty – is characterized by teachers who are concerned with the art of teaching, including the art of transmission and the art of developing rhythmic teaching. Art itself, in the form of music, dance and eurythmy, painting, sculpturing, drama and so forth, will permeate every subject. Lastly, an important element in creating a living, dynamic teaching that can appeal to the pupil's imaginative forces is the concept of natural authority.

## PART 3. THE THIRD SEVEN-YEAR PERIOD

### The grandiose metamorphosis

Central to Steiner's developmental thinking is the concept of metamorphosis. According to Steiner, one is not only dealing with continuous growth; there are also leaps in development, where something completely new emerges. This can be illustrated by the growth of a plant from root to leaf and flower. Each appearance is part of the same organism, but in its own way it expresses something unique. Steiner calls the transformative process of puberty "the grandiose metamorpho-

sis", which is most clearly expressed in the youth's intensified and individualized interest in the external and internal world. For Steiner, it was imperative to expand the concept of sexual maturation. The biologically visible uniqueness of the third seven-year period is sexual maturation, but Steiner underlines that "Earth maturation", is a more adequate term: "sexual maturation (...) sensory maturation and respiratory maturation [can be perceived] as different aspects of Earth maturation" (Steiner, in Zech, 2019, pp. 1–6).

## Transformations in the brain, in breath and in the limbs

External characteristics of the metamorphosis of puberty show up in sexual maturation and in transformations in the brain. With regard to the latter, we know today that there is a development in the forehead that is linked to thought, memory, empathy and awareness (Sørensen, 2018). "Puberty", writes the biologist and educator Markus Lindholm, "is reminiscent of the metamorphosis that insects go through in the pupal stage" (Lindholm, 2021, p. 250). This is expressed in a greater cognitive ability. But, according to puberty researcher Claus Højberg Gravholt, the brain is also rebuilt in such a way that young people are able to put themselves in other people's place (in Sørensen, 2018). In a Waldorf pedagogical perspective, this ability to empathize is shaped both by the foundation laid in previous age phases and by the way in which adults address youth during puberty.

Another external expression associated with "the grandiose metamorphosis" is that the lung volume becomes considerably larger. Up to the age of 13/14 (girls) and 15/16 (boys), the vital capacity of the lungs (volume of air) increases with 41% (girls) and 55% (boys). The breath goes deeper and slower (Kranich, 2003, p. 179). According to Kranich, the increase in vital capacity means a radical deepening and strengthening of the respiratory process. Steiner regarded breathing as an outward expression of emotional life (Steiner, 2013, p. 208). The change that takes place in the lungs and the breathing of the young person then has, according to Steiner and Kranich, an inner side, namely that deeper feelings such as longing and love can be more prevalent (Kranich, 2003, p. 180).

A final external expression has to do with the growth of the limbs being intensified and the skeleton stabilizing. The inner side of these external expressions is, according to Steiner, that the thought life (connected to the nervous-sensory system), the emotional life (which has the breath as its medium) and the will-life (connected to the metabolic-limb system), are internalized and individualized (Steiner, 2013). As a consequence, the inner biological and spiritual processes bound to sexuality and a more intense experience of the outside world leads to an awakening of the I. In such awakening, vulnerability, conflicting emotions and a new ability to ask ex-

istential questions are linked to feelings of guilt and responsibility. In this context, Lindholm (2021) coins an unusual and interesting term, which hardly translates from Norwegian: *alvorliggjørelse*. Translated literally, it would be something like "seriousness-making". He writes that in adolescence, the youths create a new arena where "both the world and oneself appear as something different than before". The seriousness-making arises through the recognition of being an "accomplice" (p. 249). Put differently, a nascent ability to feel responsible, now not as a duty given from outside, but as an ability that to a greater extent arises from within.

At the age of fourteen and fifteen, the human being is, according to Steiner, capable of beginning to formulate his own opinions, concepts and ideas. He further claims that if we as educators fail to inspire young people to develop independent thought, the thought-process becomes stiff and the youths may feel trapped within themselves, in their physical bodies. Conversely, if teachers manage to appeal to youths' own judgment, they become mentally more elastic, mobile and creative. Not only does this become a strength in adolescence; the human being retains throughout life a certain mobility and adaptability to new life situations: "What we have learned at school does not only live in our memory" Steiner claims in his lecture in Norway, in 1923, "it lives on in our whole being. You get old and white-haired, wrinkled and stiff-legged, perhaps plagued by gout. Nevertheless, the soul can preserve its freshness up into the highest old age, rejuvenate without going into childhood" (Steiner, 2008, p. 48).

To sum up: The basis of the Waldorf school's didactics in the third seven-year period is that teaching is increasingly directed at the pupils' ability to think independently and form judgments. Educators are encouraged to facilitate opportunities for the youth to reflect on contexts, draw conclusions and create their own argumentation (Mathisen, 2021, p. 31). Here, the didactic becomes to a greater extent phenomenon-based, so that the student's mental processing is activated for learning. The imagination will still play a role in the development of thought in adolescence. "The teaching therefore emphasizes a vivid and visual presentation of the subject matter as a background for the students' exercise of judgment and more abstract thinking" (p. 30).

## CONCLUSIONS

According to Steiner, "the individual life stages relate to the whole of life as head, lungs, heart, arms and legs relate to the physical organism as a whole" (Steiner, 2008, p. 17). With regard to education and didactics, one must, therefore, keep the inner connection between the three seven-year periods in mind. Steiner encourages teachers to be aware that the first seven-year period is highly forma-

tive for children. This means that the kind of environment we provide for children, and who we are as human beings and educators, will be deeply ingrained in the child. The pedagogical intention is that the vital bodily development that characterizes the child in this first phase of childhood becomes the basis for an inner, equally vital movement when the child starts in primary school, around the age of 7. Now the teaching shall support the pupil's ability to develop (among other things) a vivid and rich imagination and a strong memory in the second seven-year period. Building on this, the teacher can now teach in a way that is awakening the youths, and inspire them to meet the phenomena of the world with their nascent abilities to judge and think independently in the third seven-year period (Steiner, in Huber-Reebstein & Huber, 1982, p. 10). According to Steiner, everything we give the child as a good surrounding for imitation, generates feelings of "joy and love in early childhood". These "[revitalizing] developmental forces lay the groundwork for the child to become mentally and physically plastic and mobile" (Steiner, 1966, p. 103).

In the early school age and towards puberty, teaching should, according to Steiner, be permeated by an artistic mindset and artistic activity. If the child has already had a childhood where the whole body has been involved in the learning process, they will now have good conditions for undergoing a metamorphosis where external vitality becomes internal vitality. The vitality that flowed through early childhood is internalized into vital imagery and imaginative life. Now the teacher in the broadest sense of the word must become a teaching artist. Steiner stresses that the teacher must not teach dry and lifeless concepts and thus "bind the child in his spiritual development", but "nurture the child with concepts, sensations and impulses of will that do not have sharp contours, but can develop with the child" (Steiner, 2008, p. 19). Such teaching requires a very specific ability in the teacher: imagination and the ability to create images the child can be inspired by and live with.

The goal is that the development of the learning, connected with imitation from early childhood, transformed into a living and imaginary inner life in primary school, becomes a possibility for the youth to become a free and responsible adult who is a co-creator in society and in their own lives. Freedom, Steiner claims, is not something I can *give* a person. Rather, they must experience it for themselves. I, as a teacher, must develop a reverence for the deity in every individual human being. Then I can "educate everything in the human being except what belongs to the self, and then I wait for it to take hold of what I have invoked. I do not coarsely handle the development of the human I, but prepare the soil for its development, which takes hold after puberty" (Steiner, 1997, p. 66).

My aim in this article was to give a broad presentation of the main ideas of Waldorf education, especially in relation to the seven-year periods, and to give

examples of how this educational approach can be supported by contemporary research in other but related fields, such as neuroscience. A well-known motto in Waldorf pedagogy is "education towards freedom". In conclusion, Steiner's goal concerning the learning processes and developmental processes he recommended as a foundation for the Waldorf curriculum, can be summed up in his own words: "The most important thing for which we can prepare a child is the experience of freedom, at the right moment in life, through the understanding of one's own being" (Steiner, 1997, p. 66).

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