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# Media education in Waldorf/Steiner schools

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This article explores the distinctive approach to media education in Steiner/Waldorf Schools, focusing on delayed introduction of electronic media. Addressing a research gap, the article highlights the unique developmental phases guiding media pedagogy, combining direct and indirect media education and the so called “media maturity tower.” A central focus is the alignment of media pedagogy with the cognitive developmental stages of students. There are three distinct phases addressed in connection with different topics within the school curriculum. These phases underscore the educational commitment to age-appropriate media engagement and enable a comparison between the rather critical stance taken by Steiner/Waldorf Schools and the current trends regarding the use of media in education. The article highlights the need for further research on the long-term impact of the developmental approach here described on students’ media interactions in adulthood.

## KEYWORDS

education, media literacy, csunplugged, computational thinking, stem education, Waldorf education, Steiner schools, Waldorf school

## 1 Introduction

Media education is a subject undergoing constant evolution and transformation, as societal conditions and technological prerequisites in schools change rapidly, surpassing the pace observed in other STEM disciplines, such as mathematics or physics, in the context of student education (UNESCO, 2023, p. 9). Notably, there has been limited research on media education in Waldorf/Steiner Schools. Consequently, this article draws upon non-scientific sources, recognizing the existing gap in academic exploration.

The specific approach to media education in Steiner/Waldorf Schools is the focal point of this article, aiming to present and justify its divergence from conventional media education. One notable distinction lies in the delayed introduction of electronic media compared to many other educational institutions.

A research desideratum is identified in this context. Further studies are warranted to investigate the approach of Steiner/Waldorf Schools concerning media, with a particular emphasis on exploring what sort of relationship Waldorf students or alumni exhibit toward electronic media in later life.

## 2 Media literacy and media maturity

The concept of media literacy was succinctly described by the British researcher Sonia Livingstone.

*The more that the media mediate everything in society—work, education, information, civic participation, social relationships, and more—the more vital it is that people are informed*

*about and critically able to judge what's useful or misleading, how they are regulated, when media can be trusted, and what commercial or political interests are at stake. In short, media literacy is needed not only to engage with the media but to engage with society through the media (Livingstone, 2018).*

The educational goal at Waldorf schools can be described as “leading students to media literacy and media maturity”:

*By the time they leave school all pupils should be able to use all kinds of media properly for their own education, and also understand exactly how media are technically structured and how they work. To this end they need to have been equipped with skills in the use of educational media through theoretical and, above all, practical media education (Hübner, 2019, p. 2).*

So, even though the goals of Steiner/Waldorf Schools align closely with the aforementioned concept, the approach or path taken is quite different.

Waldorf schools are generally regarded as institutions that approach technology and electronic media critically, using them very little to none in their teaching or not at all. Media reports typically emphasize the artistic approach, as exemplified by some news broadcasts: (Silicon Valley School, 2011; Inside A Tech-Free School, 2019). Instruction based on “arts and crafts” indeed plays a significant role in Steiner/Waldorf Schools. However, Rudolf Steiner, the founder of Waldorf education, also aimed to nurture students as contemporaries who understood and were able to navigate the technologically driven world around them:

*You just need to ask yourselves how many people regularly use the telephone, public transportation [...] without having the faintest idea of how they work. In our civilization, people are practically engulfed by a technology that they do not understand. [...] Ordinary consciousness is unconcerned about whether it understands the processes or not, and from this point of view it can be argued whether these things matter or not. But when we look at what is happening in the depths of the unconscious, the picture looks entirely different. To use modern technology with no knowledge of how things work or how they were made is like being a prisoner in a cell without windows through which one could at least look out into nature and to freedom. Educators need to be fully aware of this (Steiner, 2003, p. 232).*

Examples of this type of instruction include the structure of physics classes in the 9th grade focused on combustion engines or electric motors, and the surveying project in the 10th grade, where students experience how mathematics is applied in a practical context (Rawson and Richter, 2014, p. 326). It could be added, that “engineer” is second highest on the list of career choices for former Waldorf students (Barz, 2007, p. 52).

Developing ways of equipping high school students with an understanding of how computers work has also been a feature of Waldorf schools. Over the years, ICT lessons have become an established curricular item in many of them (Rawson and Richter, 2014, 347).

With the development of social media and smartphones the situation in all schools changed radically: Children were now having

their first contact with digital devices at a much earlier age, while the school curriculum had not yet made any provision for such devices. As a result of these developments, in schools all over the world curricula were adapted such that digital devices were already being used in kindergartens (Medienkindergarten Startseite, 2023). The practitioners of Waldorf education take a critical view of this development.

### 3 The approach to media-education in Steiner/Waldorf schools

One of the fundamental, pedagogical principles of media-education in Steiner/Waldorf schools is that the media used should align with the child's stage of development. Waldorf education is based upon a cognitive development theory, comparable to that put forward, for instance, by Vygotsky.

Accordingly, it seeks to unfold a thematic sequence which supports the child's development. Ideally this means that children should build up a rich store of sensory experience, learn, and practice useful cultural and social skills, and complete the transition from orality to literacy (the ability to read and write) before they begin adding media literacy to their list of skills. In setting such a standard, Waldorf education is working on the principle that there are distinct phases of childhood. Each of these covers roughly 7 years. The first phase runs from birth to the change of teeth (0–7), the second from the beginning of school attendance to puberty (7–14), and the third from 14 to 21, which corresponds to the age of legal majority (Rawson and Richter, 2014, p. 22).

The first phase is chiefly concerned with the growth of the body and the development of the senses. This means, for instance, that in the pre-school period, the child's engagement with her environment occurs in her interactions with her (kindergarten-) teachers and peers in “real-world” experiences and not on screens. The vitally important thing in the pre-school period is growing up in a socially and language-rich environment. The use of electronic media at this age, therefore, is not beneficial to the child's development. There is indeed a growing body of evidence that it may be more harmful than helpful. Not only does it negatively affect social development (Bozzola et al., 2022), but also in a growing number of children it has been found to impair eyesight (Foreman et al., 2021).

In the second phase, the first years of school are characterized by an actively artistic approach to lesson content (Rawson and Richter, 2014, p. 59). Thus, for instance, in the process of learning to write, the letters are derived from hand-drawn pictures (Hübner, 2019, p. 3).

The third phase begins around the age of 14.<sup>1</sup> This is the point at which the development of the pre-frontal cortex starts. Accordingly, lesson content increasingly addresses the students' intellectual and critical faculties. This is the age, for instance, when science teaching begins in earnest in Waldorf schools (Rawson and Richter, 2014, p. 313; Richter, 2019, p. 93, 416).

<sup>1</sup> The onset of puberty has shifted earlier in industrialized countries, but this applies more to bodily than to emotional and cognitive development, which have not shifted to the same extent (Knussmann, 1996).

The phases just described provide a guide for what should be taught in media education at any particular time.

The first phase is largely concerned with real world themes. As a rule, electronic media will only be used, for instance, for the purposes of communication. Nor are they used extensively in the second phase: writing, painting, drawing and, of course, speech are the media used in lessons. During the first years in Waldorf schools there is a lot of recitation and singing in all lessons, and many children play a musical instrument (Rawson and Richter, 2014, p. 126, 298). From this point of view, it can be said that a lot of media education takes place in Steiner/Waldorf schools.

In the third phase, the methods are augmented such that the students now also become acquainted with digital tools and use them in class where appropriate (Figure 1).

### 3.1 Direct and indirect media education

A basic principle of media education in Waldorf schools was developed by Edwin Hübner: it involves making a distinction between direct and indirect media education, and can be described as follows:

*Direct media education has the added task of conveying a basic understanding of how various media function in principle. The task of indirect media education is to encourage children and young people to practice all the skills they need in the information age, but which they cannot acquire in direct contact with media. Indirect media education, for example, provides practice areas in which pupils can train and exercise concentrated attention. Above all, it ensures that young people learn how to acquire knowledge, i.e., how*

*to create a meaningful whole from the many individual pieces of information provided by the media. Children and young people need to learn how to build knowledge from information. In short: Indirect media education trains the self-competence required in the age of digital technology (Hübner, 2019).*

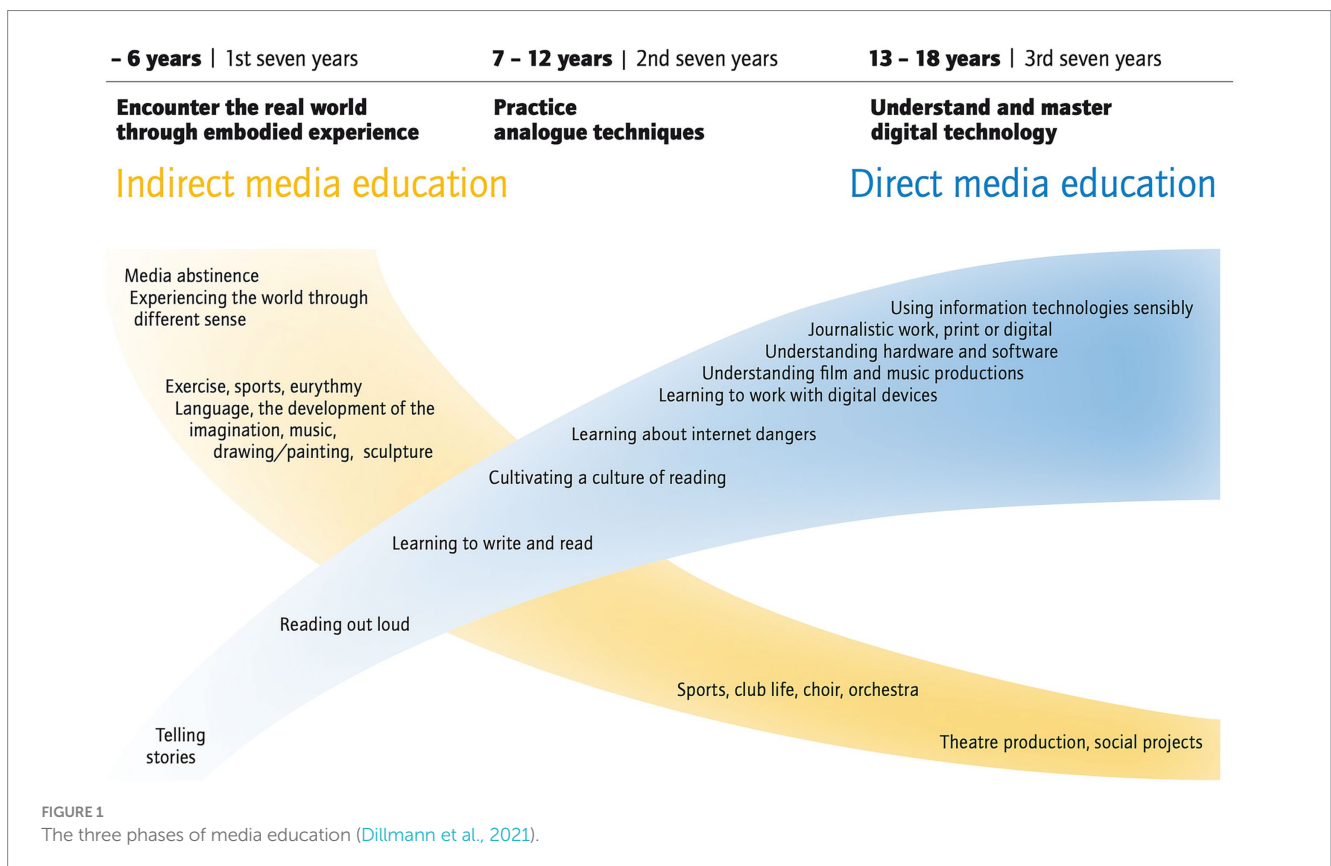
This idea of preparing for the eventual use of electronic media while at first not using them is rather unique.

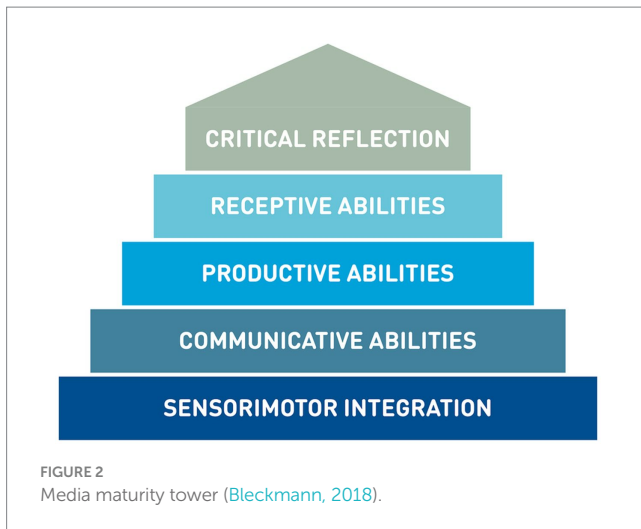
In the curriculum of Waldorf/Steiner schools digital media do not replace analog media, they extend them, in that the abilities acquired by use of the latter can subsequently be applied to the use of the former. In parallel to this, it is also a matter of gaining an understanding of the processes going on in technological devices and how they work, as mentioned above. Another approach to this, put forward by Paula Bleckmann, identifies the development of media literacy and media maturity as the central concern (Figure 2). This model envisages two guiding principles for the purposes of curriculum development:

1. Analog, direct multisensory experiences should precede digital experiences.
2. Active and creative media activities should come before receptive consumption (Bleckmann, 2018).

The hallmark of this model is that it seeks to combine different approaches to media education, which were historically regarded as contradictory. It places them in a meaningful sequence, rather than requiring a decision as to which one is right.

The first level focuses upon sensory-motor abilities—not only upon the development of bodily agility, but also on the links between





these movement skills and other sensory capacities. The second level is concerned with communication: In learning to communicate, the child goes through a developmental sequence that begins with movement, in other words, gesture. Then later the spoken word is added in, and this may then be enhanced by drawing pictures, the sequence culminating in the child learning to write. These first two levels correspond to the so-called protection-oriented approach within media education (Hoffmann, 2020).

With the third level then come the productive abilities: young people's productive capacities greatly increase and diversify. This corresponds to the active-productive approach within media education, an example of which is what by now is a tradition of young people producing their own radio shows (Kangas and Sintonen, 2014).

At the fourth level we have the receptive abilities, which evolve as the child grows. This corresponds to the reception-oriented approach within media education, which aims to change the way media content is perceived by critically analyzing it and by exposing the manipulation strategies within media products. It also currently involves critical film analysis (Gentikow, 1998).

The last level—that of critical reflection—corresponds to a critical-emancipatory approach to media education in the tradition of the Frankfurt School's critical media theory, which aims to promote critical (digital) citizenship, with an emphasis on understanding and countering the manipulative potential of mass media in society (Bleckmann, 2018).

A further characteristic of electronic media use in Steiner/Waldorf schools is that, as a rule, they will be employed for specific purposes as an adjunct to lessons, rather than as regular, ever-present tools (Hübner, 2019, 2022; Dillmann et al., 2021; Pemberger, 2023). Waldorf schools are also engaged upon reviewing and researching their own approach to media. In 2022, an evaluation of media education was published, which included a survey of more than 5,000 parents and almost 1,000 teachers from Montessori and Steiner/Waldorf schools and kindergarten (Bleckmann et al., 2022).

## 4 Discussion

The introduction of a new technology normally goes through a series of phases, often referred to as the “hype cycle” (Fenn et al.,

2003). After a phase of initial enthusiasm society becomes aware that the new technology might have some unwanted side-effects. Then begins the introduction of restrictions to counter these side-effects. History provides us with examples such as x-rays or atomic energy. A current example is the increasing use of AI (Roose, 2023). The same thing is observable with the development of electronic media in general, and when we consider the use of technologies such as smartphones or tablets in school, this is of particular relevance in relation to media education: First came the great wave of enthusiasm: there were projects such as “one laptop per child,” “Steve Jobs schools,” and many others. The general consensus was that there would be a revolution in learning (Stahl, 2007). Several years later it became apparent that learning through electronic media did not produce the successful results that had been hoped for (Pascoe, 2017; Ames, 2021).

Contrary to this enthusiasm for the potential of technology, researchers such as Hattie repeatedly emphasized that the presence of a teacher and his or her relationship to the learners were what played the most essential role in the learning process (Hattie, 2012). Waldorf schools were reserved about media use from the very beginning, and were often viewed with skepticism on this account.

The way things are now (2023) it may seem unrealistic to have a rule preventing children under the age of 14 from using smartphones, as has long been advocated, for instance, by the waituntil8th initiative,<sup>2</sup> which refers to the fact that many technology executives waited a relatively long time before their children were allowed to use smartphones. In recent years, however, there has been a shift in the attitude to media use by children. Some examples: California limits the use of smartphone by students while they are on campus (Spiratos and Ratanasiripong, 2023), the state of Utah is introducing a media curfew for minors and more in the Utah Social Media Regulation Act (Socialmedia.Utah.Gov, 2023); Sweden is subjecting the currently obligatory use of media in pre- and primary schooling to thorough investigation (Associated Press, 2023). The UNESCO has made some conclusive pronouncements on this matter:

*There is little robust evidence on digital technology's added value in education. [...] A lot of the evidence comes from those trying to sell it. Pearson funded its own studies, contesting independent analysis that showed its products had no impact (UNESCO, 2023).*

The most far-reaching example here is an initiative in the town of Greystones in Ireland. There the use of smartphones by children in primary school is taboo. About 95% of parents took part in an initiative to ensure that the children do not have smartphones at home either. This initiative also has the expressed support of the Irish government (O'Brien, 2023).

The aim in Waldorf schools is that by the time they leave school students should have acquired a mature and responsible attitude to media. In this they do not differ from most other schools. Where they do differ, however, is in their pedagogical theory of development. From this it follows that the motto “the earlier, the better” is not a good guide to educational practice. On the contrary, it rather indicates that it is better to acquire within the framework of indirect media education the skills that will later be necessary for coming to terms

<sup>2</sup> waituntil8th.org



with digital devices. This attitude can create the impression that Steiner/Waldorf schools reject modern technology, although this is not the case.

The general Steiner/Waldorf thinking is that each school can decide for itself when to introduce specific teaching aids, in particular, electronic media (Hübner, 2019).

There is an approach known as csunplugged, which also aims to convey an understanding of how computers work (csunplugged.org). This approach is now more than 30 years old (Bell et al., 2012). It has stood the test of time as a way of conveying a basic understanding of informatics to primary school children. In the meantime, there are projects which use this as an approach to understanding AI (Lindner et al., 2019). These applications of this approach appear to slow down the processes of comprehension they involve. The effect of this is that they can also be understood by pupils who take longer to grasp things. This type of approach is very similar to the approach in Waldorf/Steiner schools. Furthermore, they open up a field of deeper empirical research. With the Media Maturity Study (Bleckmann et al., 2022) a start was made on investigating the media situation in Waldorf schools. Here also it would be worthwhile to envisage further in-depth research into whether young adults who attend or have attended a Waldorf school display different behavior in relation to electronic media, or not.

While this article takes a critical view of smartphones and electronic media, this should not be taken as an outright condemnation of these devices. Smartphones and electronic media are helpful in many areas of life, but this does not imply that they should be in the hands of young children. It goes without saying, for instance, that we do not permit children to drive cars—even though this might be quite helpful—because they are not yet capable of handling a car in a sensible manner (Crossman, 2016). One of the things this article seeks to do is to make the case for a similar attitude to electronic media, without rejecting them in principle.

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The author declares that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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