

Waldorf Education Your Questions Answered

What does your digital technology curriculum look like?

Rationale

Digital technology is an integral part of twenty-first century human endeavour, and it empowers us in varied ways. Complex technologies present many new ways of learning and working, often by sidestepping time and space and locating us in an infinite network of here and now. However, these remarkable extensions to our lives present challenges to educators as we try to assess which digital technologies are advantageous and in an educational context, pedagogically appropriate.

It is the task of teachers in Steiner/Waldorf primary schools to lay the foundation for lifelong learning through a uniquely human and richly choreographed education. As the students' journey continues into high school, they easily learn to incorporate digital technologies effectively, creatively and ethically.



Steiner/Waldorf primary education is a multi-disciplinary, multiple intelligence, engaging and dynamic experience. It provides a natural and human environment where children learn to observe, question and express themselves fully. An important underlying philosophy of Steiner/Waldorf education is that young children need to communicate and learn deeply without the mediation of complex technology. This 'unplugged' experience is seen as crucial for children to develop an uncluttered self-image as well as the most valuable form of self-efficacy – one they completely own. Based on their rich communication skills and ability to produce a wide range of original creative work, students are well placed to master mechanised and digital technologies later. They develop this readiness for digital literacy based on their experiences in the manifest world.

The maturing Steiner/Waldorf student has an increasing empathetic and deep interest in the world and its humanity. They enthusiastically embrace a wide range of complex technologies, including digital technologies. They develop the faculties to understand a wealth of digital information.

Analogue to Digital

In the Steiner/Waldorf curriculum, the learning of digital technologies and skills are not the focus in primary years as is the case in current educational practice, as children first develop required skills in real life experiences (analogue) which provide a comprehensive basis for understanding the way the world is represented in digital technologies. For example, a GPS satellite, which could not work without highly complex digital technology, is nevertheless totally reliant on analogue input such as the real-world journey of electromagnetic waves or orbital gravitational forces as they exist in space. It is also totally reliant on analogue outputs – even if the GPS is controlling a driverless car, the wheels and tyres are not made of digital code but must be understood in relation to physical motion, mass and friction - in the end there is real action.



Another example to illustrate this reasoning is that it would be inadequate for a high school student to develop a computer code to help measure the moisture content of soil, if the student did not already have a sense of the reality of soil health from their direct and current experience of soil in gardening lessons.



The advantages of digital technology is not an end in itself; it is between what begins in real life as an input and what ends in real life as an output. It is knowledge and understanding of the real world that is the necessary central focus. Learning to navigate the interface between the analogue and digital world is therefore crucial for the wellbeing of young people, and it is best served by starting with a good grasp of analogue technology in the early years.



In Classes 6, 7 and 8 the students engage in a Waldorf based 'Cyber Civics' programme which prepares them for that effective, creative and ethical use of technology and learn about the measures needed to keep themselves safe when using such devices. It is packed with learning activities that call on critical thinking, ethical discussion and decision making through hands-on projects, problem solving, and role-play, all surrounding the topic of "digital citizenship" (the norms of appropriate and responsible behaviour with regard to technology use). Research shows that while young people seem incredibly tech-savvy, most know little about the core concepts of "information literacy" or, how to find, retrieve, analyse, and use information. Finally, the programme focuses on media literacy which is "the ability to access, analyse, evaluate and create media in a variety of forms".

By the time students reach high school they are ready to use digital technology as a useful tool to support and enrich their learning.

The Steiner/Waldorf Digital Technologies Curriculum aims to develop expertise in working with digital technologies, where students:

- explore and appreciate the rich culture and history of analogue and digital technologies, working individually and in groups to explore the impacts of digital technologies on society
- develop an understanding of what lies behind digital technologies, how and why they were developed and what makes them work
- explore sustainable digital technologies and use digital technologies in an ethical and safe way
- design, use and produce a wide range of digital products
- are engaged and active participants in meeting digital technologies and its place in current society
- discover how human beings can improve themselves and the environment by developing technological tools inspired by the manifest world for its enhancement
- develop imagination and solution finding capacities to digital problems



So, on the surface it may look as if we are anti digital technology, but the reality is that with a sensible approach, we can lay strong foundations for safer, competent, ethical and creative use of digital devices. This can be achieved through real life experiences which provide a comprehensive basis for understanding the way the world is represented in digital technologies. We introduce the students to digital devices at a developmentally appropriate stage when we believe they have developed a greater individual and social consciousness.