Changing the Narrative
Practical Aspects of Teaching Technology at the Waldorf School

John Trevillion

For most of my career I have taught students of middle school age. As an educator born into the age of the Industrial Revolution, I have felt an enormous responsibility to teach my students about the remarkable times in which we live, and the technologies and individuals that have shaped these very times. Like most of my colleagues, however, I have long harbored ambivalent feelings about the digital realm. I make practical use of technology, and am grateful for being able to do so. I am frequently filled with wonder with its "world-at-my-fingertips" possibilities. But as far as young people are concerned, I have been deeply suspicious of the dangers it presents and have counseled parents to shield their children as much as possible ("Give them dumb-phones!").

In recent years, however, I have found that response to be insufficient, and for the following reasons:

1. I experienced direct evidence from having taught two recent cycles of grades 5-8 students that my colleagues and I were falling short in addressing the powerful effects of the digital world on middle school students. The headline evidence during the 8th grade of the first of these cycles included cyber-bullying and sexting. Indeed, it was the appearance of these uncivil behaviors in the first 8th grade classes that introduced me to these very terms. In the most recent 8th grade I was spared these unsettling behaviors, but nevertheless found myself dealing with a distinct split between students who were immersed in the cyber-world and those who were not. Clearly, many of my students were swimming in waters that neither they nor I had charted – and had never discussed.

2. There is growing evidence that my school has been losing students – particularly in the transition from grade school to high school, and particularly among boys – on account of our lack of an organized, intentional, and comprehensive approach to the digital realm. We have had classes that involved the use of computer technology, but these classes could not in any sense be described as belonging to a coherent computer science education. We were using the technology incidentally without much attempt to truly *understand and penetrate* it.

Along with several colleagues, I became convinced that my school must find a way to address these issues. How?

To address the need for a healthy introduction to the digital world, many schools have adopted Cyber Civics, a program created by Diana Graber, a parent at the Journey Waldorf School, in Orange County, California. This three-year program, designed for students in grades 6 to 8, provides a coherent set of lessons aimed at cultivating *digital citizenship and Information and Media Literacy*. The lesson content is thoughtful and imbued with a sense of fun that engages the students for whom it is designed. It promotes healthy conversations between students who are already familiar with digital technology (typically through their smartphones) and those who are not. The use of computers is optional. Following a lengthy workshop in which Diana Graber provided the rationale for and tastes of the program *to the entire faculty,* my school (the Chicago Waldorf School) chose to implement Cyber Civics in all three grades. We deem it important that the entire program is taught by one teacher.

To address the need for a genuine penetration of the digital realm, several Waldorf high schools – to my surprise, not many – have designed and implemented computer science curricula, spread over three or four years. My school invited Chip Weems, associate professor of computer technology at the University of Massachusetts and teacher of computer science at Hartsbrook Waldorf High School, as well as author of several articles on teaching computer science at the high school level (in *Renewal* and the *Research Bulletin*), to present his thinking on computer science education at the high school level. Following a full-day workshop in which *the entire faculty* engaged with Chip through discussion and practical experiences, the faculty chose this year to implement the beginnings, with the incoming 9th grade, of an intended four-year high school computer science program. As with the Cyber Civics, we intend that the program will be carried by one teacher.

In neither of these initiatives – middle school's Cyber Civics and high school computer science – is our school breaking new ground. What may distinguish our programs, however, is their being seen as part of an over-arching narrative: *to provide a pathway for our students towards a healthy relationship with digital technology.* The teachers of both the Cyber Civics and the computer science programs are committed to this narrative. However, we do not see that commitment as sufficient in itself for an effective education. Rather, we see it as essential that the entire faculty understand, support, and be ready to communicate this narrative. This is so for the following reasons:

1. These two programs are the visible components of "the healthy pathway." Less visible but equally essential are the complementary activities that counterbalance and support engagement in the digital realm. In the early childhood and much of the elementary years, this means promoting healthy play that, in general, avoids screen technologies of all kinds. Opinions may vary as to when and to what extent introduction to digital technologies should occur. Fortunately, researchers are developing "slow-tech media guides" to help inform the very necessary conversations that can and should take place in every school that seeks to come to terms with these powerful influences. All teachers in a Waldorf school need to own and communicate their part in the journey, but they must do so *as part of one coherent narrative.* To do otherwise sows confusion and misunderstanding among parents and students as to the school's relationship with digital technology. This is especially true for early childhood and early grades teachers who, for very good reasons, promote the message that we do our children a great favor by limiting – or better yet, eliminating – exposure to screens of all kinds, and particularly to computers. This message, motivated by the deepest of concerns, has the unintended consequence of implying that "Waldorf schools are anti-technology."

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2. Waldorf teachers at every level need to be seen by their students as having developed an informed, practical relationship with this technology. A Luddite (or even, dare I suggest, an anthroposophically-derived) gesture of antipathy to technology will almost certainly fail to inspire our students. This can be challenging. I, for one, resist the many possible modes of engagement that my smart-phone makes possible for no other reason than that it requires effort. Thankfully, I benefit from the efforts of indulgent friends, colleagues, *and students,* who guide me when guidance is needed. And in spite of everything, I hang on to my smart-phone.

3. Each new "breakthrough technology" has challenged humanity's sense of what it means to be human. When Wordsworth and Coleridge gazed upon a "perfect steam engine" in 1803, they wondered aloud (sufficiently to become recorded fact) if they were in the presence of a man-made intelligent being. Less than two decades later, Mary Shelley was imagining and writing about a being "created" by one Dr. Frankenstein and animated by that mysterious, invisible energy named 'electricity'. Around the same time, the inventor Charles Babbage began devising his "difference engine", a machine that "could think", and later his colleague, Ada Lovelace, devised the first "computer program". With the advent of the modern computer in the 20th century, the temptation to believe that "computer intelligence" will match or surpass human intelligence has never been greater. Each new technology presents a new mirror in which to see ourselves – who (or what) we are, and who (or what) we are not. For an education that devotes and prides itself on "educating free human beings who out of themselves impart purpose and direction to their lives", what could be more important than guiding our students into not simply a practical use of technology, but a clear understanding of what it is (and is not)?

I am convinced that providing a pathway for our students towards a healthy relationship with digital technology is one of the paramount challenges of our century, and one with which Waldorf schools are uniquely prepared to engage. To the extent that we take up this challenge, we will be fulfilling our core

mission. To the extent that we avoid this challenge, we will become increasingly irrelevant.

Meeting this challenge calls for conversations and research within each of our schools, engaging the entire faculty and community. Meeting this challenge also calls for conversations between schools, most obviously in conferences. Finally, meeting this challenge calls for commitment: changing a narrative that has taken decades to take root will not be quickly or easily achieved.

John Trevillion *has served as a class teacher to eight cycles of Waldorf upper elementary school students, guiding them from sixth through eighth grades, primarily at the Detroit and Chicago Waldorf Schools. In recent years he assumed the role of college chairperson at the Chicago Waldorf School, and he continues to teach occasional science-based blocks in the middle school. John has written many class plays, including three musicals in collaboration with colleagues that he considers more musically gifted.*