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Research Bulletin

Fall/Winter 2020

Volume XXV · Number 2

RESEARCH INSTITUTE FOR

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Waldorf
EDUCATION

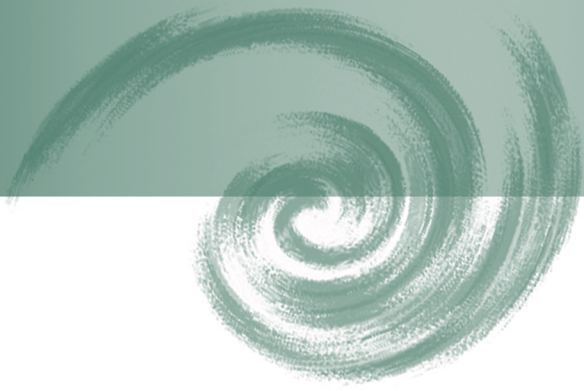


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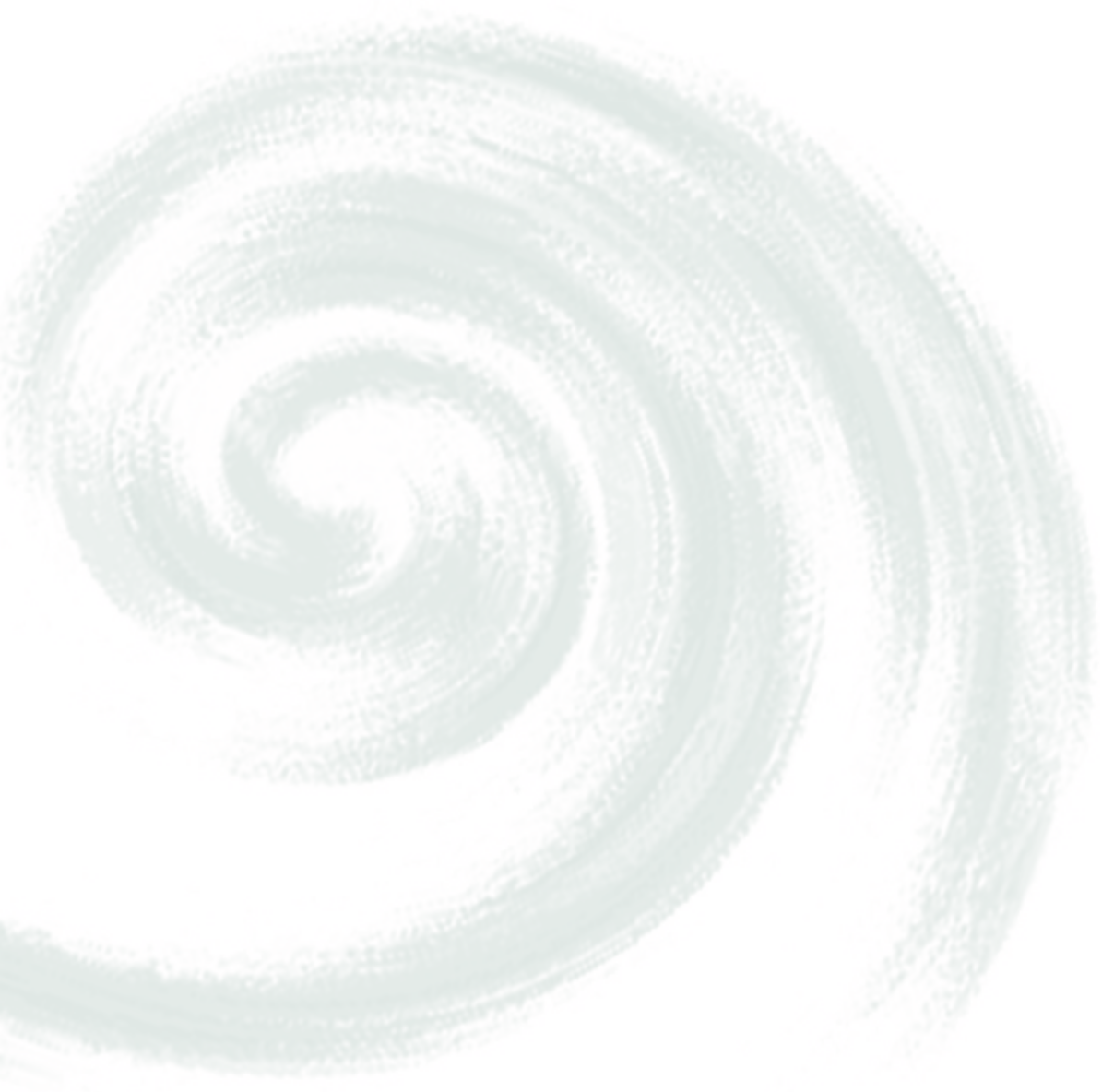
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The editor's introduction to the previous issue of the *Research Bulletin* ended with a wish—originally hopeful, in hindsight naïve—that the Spring 2020 issue would reach the readers in a post-pandemic world. Well, here we are.

The experience we call 'life' has clearly undergone quite a transformation. For many, other people have reconfigured into possible sources of danger. So did the objects and surfaces that we touch in the world. So did our very own hands, with which we do such touching. Time goes on in an abnormal new normal: Like parents who cannot think of a time in which they were not occupied with kids, in our memories of past events everyone is wearing a mask. We already forgot how struck we were in April or May by the amazing relevance of what we re-read in Camus' *Plague*. The initial wave of anxiety has petered out into annoyance, impatience, then a new wave of fear.

But teachers, and the teachers of teachers, cannot afford to be idle in a time of crisis, even when the crisis is extending into its seventh or eighth month. And while the events of the time offer an abundance of content to be taught—from the historical epidemics that decimated entire populations in pre-Renaissance Europe and post-Columbus America to the renewed significance of a social contract based on mutual responsibility—the *how* of teaching became an issue.

To this we devote our current issue of the *Bulletin*. Focusing fully on the pedagogical and social challenges posed by the COVID-19 pandemic and its associated restrictions, we offer here a variety of accounts, fresh from the classrooms—both virtual and physical—of adaptations and experimentations while teaching under the constraints of distance, uncertainty, and at times even fear. From homebound seventh graders in Brooklyn, NY, to high school Zoomers on Maine's coast to hybrid classes in the San Francisco Bay Area, many of the accounts presented here tell the story of transformation from skepticism to pedagogical accomplishment.

An approach reflected in several of these contributions is captured in Douglas Gerwin's essay, with which we open the issue. Douglas, like so many of the teachers writing here, is appreciative of the emergency solutions

afforded by technological platforms, but he is wary of the temptation in making some of these temporary measures permanent. "To adopt digital online formats as the primary new paradigm for learning," he writes, "would be to impoverish education by recasting it as little more than instruction."

Our reports from the schools and from the experiences of teachers open in a lyrical, personal tone, with which Caroline Martin observes how both her high school students and her pre-K daughters at the Rudolf Steiner School of New York reach certain childhood heights just before the Corona shutdown. Martin proceeds to describe the set of adjustments to teaching, curriculum, and life itself in the first months of online learning. A geologist, a teacher of the natural sciences, and a lover of nature, Martin concludes with an apt image of the new task she and her colleagues embraced in facing the shutdown challenge: "Yes, the river may have run dry but our task was now not to idly watch as the waters returned, but to venture forth and map the bed."

This is followed by reports from the lower school experience, offered by two class teachers. Steve Simonak reports of the set of adaptations to his work with the seventh grade at the Brooklyn Waldorf School; Karen Atkinson, of the Waldorf School of Princeton, expands the view with a detailed review of the learning curve that aims to perfect the practices of online teaching in order to keep pursuing an education that is filled with love, warmth, and creativity.

We then turn to a set of descriptions, reflections, and recommendations coming from several high school teachers: Selim Tilili reports on science teaching during the shutdown as well as after school reopened for in-person learning. David Sloan gains a new appreciation for the capacities of teaching with technological mediation but repeats the cautionary note on the limits of technology. Carol Bärtges describes the experience of teaching *Parzival* online and especially the challenge of invoking the impulse of individuation when the learning situation appears to be a solitary one. And Stephen Sagarin underlines the opportunities of positive effects made available by the unfortunate circumstances of the pandemic.

Tucked in between these reports, Jamie York shares lessons from online teaching earned even prior to the COVID shutdown. York, a seasoned Waldorf teacher with 35 years of classroom experience, decided to shift to online teaching several months before the pandemic struck. His Math Academy for grades 5-12 was launched in the Fall of 2019, giving him a head start on the rest of us in terms of incorporating principles of Waldorf education into screen-mediated teaching. He was positively surprised by the results of his experiment and has several insights to share.

Alison Davis, of the Waldorf School of the Peninsula, grabs the opportunity offered by the pandemic to re-examine other pedagogical practices. "If there were ever a time to shed an old practice and try something new," Davis writes, "it is now, when so much is up in the air and primed for new imaginations." The change she advocates exploring is framed by the question: Can we find alternative forms to motivating students beyond the grades that are supposed to assess and reward their efforts? Her answer, based on the pragmatic experimentation process known as "active research," and on measures implemented at her school is a resounding 'Yes.'

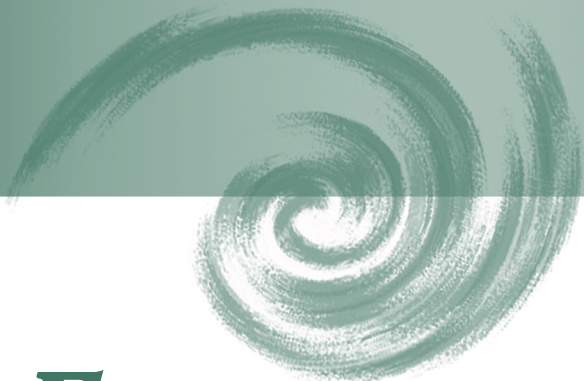
Patrice Maynard also embraces the crisis of the moment to explore a wider question. In her thoroughly-argued opinion essay, Maynard takes a close look at the governmental intervention in public and private education systems in response to COVID-19. Such interventions, coming from governmental agencies as well as from the corporate world, she shows, are nothing new: they have been going on for decades through the imposition of federally-developed education standards, as well as in the form of an enormous spike in the diagnoses of Attention Deficit Disorder and the normalization of its treatment through powerful drugs. In what amounts to a scathing critique of a creeping process of such "normalization," Maynard's essay calls for a rethinking of a different "new normal," one that "can also allow us to imagine an education that genuinely frees us all" to think with our hearts. She concludes with a call for the "new normal" to be assessed "on a human scale, not on a two-fold screen with high stakes performance of shallow testing. Let's proceed with deep, three-dimensional, thinking, human hearts, intelligent hands, and flexible and wise minds."

We end our offering of COVID-related articles with a long and rich essay by Dr. Michaela Glöckler—former Head of the Medical Section at the Goetheanum, an experienced pediatrician, and decades-long supporter of Waldorf education. In an article which is both descriptive and argumentative, Dr. Glöckler surveys the questions of diseases, viruses, and immunity from the point of view of anthroposophic medicine, and she criticizes the national and global responses that discount the roles of individual agency, community, and a deep sense of humanity in responding to the pandemic. Dr. Glöckler calls for mining the insights and resources of anthroposophy for a response that goes beyond symptoms and momentary crisis, a response that is invested at the outset in the interrelationships among society, education, ecology, and health.

The issue concludes with our usual reports from the world of Waldorf Publications, the Online Waldorf Library, and the Research Institute for Waldorf Education. As is our custom in the Fall issue, we include here an exhaustive index of the articles published in the *Bulletin* since its inception, most of which are available at the Online Waldorf Library.

We hope, as always and perhaps more than ever, that the reports and reflections presented in this issue will be able to offer support and insight during a time of challenge and experimentation. And we continue, hopefully and perhaps naïvely, to wish the coming of a post-pandemic reality, into which we hope to enter with the valuable lessons of crisis.

Authors who wish to have articles considered for publication in the *Research Bulletin* should submit them directly to the editor at: theresearchbulletin@gmail.com.



The Limitations of Lifeboats

Douglas Gerwin

Earlier this year, as Waldorf institutes and schools were pivoting almost overnight towards online courses, I wrote a piece in which I compared the abrupt (yet necessary) switch from face-to-face format to online platforms to the leap from a crippled cruise liner into life-saving lifeboats (see special edition of *Center & Periphery* of 5 May 2020).

Now, six months into the COVID-19 outbreak, we find ourselves bobbing on the open high seas of education with as yet no clear view of safe harbor on the horizon. Some passengers in our programmatic lifeboats can be heard bemoaning the loss of what they once enjoyed in earlier times, but other participants—among them members of a younger generation of teachers—are voicing their approbation of this new pedagogical vehicle, at least for adult learning. Some are even venturing to say they are enjoying the ride and preferring it to what went before.

From teachers in training (and even some of my colleagues) I hear, “Break-out groups make it so much more possible to contribute to class discussion”; or “I really appreciate the convenience of studying out of my own home”; or “This is saving me a bundle of money.” One trainee, in a moment of frustration this past summer, blurted out: “You old guys are complaining only because you can’t find your way around online platforms!” To summarize this view—in the words of a political flashpoint heard around the world earlier in the year—the message being delivered to those who regret the switch to online courses is: “Get over it!”

For the moment, I will set aside the pros and cons of online school for children and adolescents and focus instead on the learning and training of adults. For many of them, the advantages of online learning are hard to deny. Those who sign up for this kind of program generally find it is:

- Less expensive – in tuition, but also in associated costs like travel, room & board, childcare
- More convenient – because it can be experienced in the comforts of home

- More accessible – for reasons already mentioned, and because you can log on from anywhere
- Shorter – by necessity, because the medium requires concentrated and motionless attention that can be sustained only for short periods of time
- More efficient – since a single class can be linked to countless supplementary sites and Google folders and videos and other resources
- More likely to be up-to-date – for the reasons of its efficiency
- More participatory in discussions – for instance, in utilizing break-out groups and other features of online platforms
- More widely networked – in that you may be able to connect with students from any culture and across all time zones (assuming some don’t mind taking classes during the night)
- Safer – both in terms of physical health risks and protection from social unrest
- Easier to capture a class (or a phrase) you missed – just click on the recording and rerun!
- Easier to hold instructors accountable – recordings are reliable witnesses in the event of a complaint
- More custom-designed (if recorded) – you get to choose your pace of learning

So, why don’t Waldorf institutes, many of which proved to be so nimble in adjusting to this medium, hasten to convert their programs entirely into online offerings?

There are many possible answers to this pointed question, starting with the obvious ones about the difference between learning cheek-by-jowl and learning in physical isolation. Think only of the value of choral singing or speaking, for instance, which are physically impossible to arrange and at best can be simulated only through electronic synthesis.

However, here are a few further less commonly articulated considerations:

- Digital devices appeal primarily to the eye, to a lesser degree to the ear. However, we speak of a full experience of Waldorf education as embracing as many as 12 senses. To take but one example: Waldorf education relies heavily on the sense of proprioception (or what is sometimes called “the sense of one’s own bodily movement”) to deepen an understanding of even the most abstract principles. In one of our courses on collegial relations, movement exercises drawn from the repertoire of “eurythmy in the workplace” are used to understand how social organizations work—or fail to work—in a healthy, coherent way. Of course, one can conduct movement exercises online, but these are less common, and, interestingly enough, they usually require participants to step away—even step out of camera view—to perform them.
- By the same token, digital technology works primarily with the nervous system and in so doing addresses primarily our intellectual cognitive capacities. However, a human being in health and wholeness is endowed with ten bodily systems, and in the ideal, Waldorf education engages all ten – most evidently capacities of feeling through respiration and circulation (heart and lung) and capacities of volition and transformation typified by the digestive system (“gut” learning, we call it). If anything, digital technology tends to tamp down the functions of heart and lung (breathing, for instance, becomes more costal or shallow during extended periods of screen activity), and it can even suppress gut activity below the diaphragm. (Consider video gamers who engage this medium for hours without feeling hungry or the need to take bathroom breaks.)
- Studies have shown that as much as 90 percent of our communication is conducted in ways other than through language. With the help of gesture, physical posture, intonation, facial expressions, and sheer bodily presence we convey far more than the visual/aural medium of digital technology can capture. On this view, we teach—just as we learn—with our entire 10-fold bodily instrument, and yet nine of our ten “strings” remain muted in digital discourse. We exacerbate

Digital technology is a superb medium for instruction. By contrast, education ... involves a teacher drawing forth from the student something that is already there, albeit slumbering.

this limitation by focusing our video cameras, for the most part, on our “talking heads.” Like the Ancient Romans, who created the new sculptural form of the dis-embodied bust, we narrow our appearance to our facial features.

- *Education* should not be confused with *instruction*. There is good reason why we speak of “Waldorf Education,” not of “Waldorf Instruction.” The latter involves conveying information from one place (located in the teacher) to another (located in the student). Digital technology is a superb medium for instruction. By contrast, education (as its Latin etymological heritage suggests) involves a teacher drawing forth from the student something that is already there, albeit slumbering. Like singing into a piano, the note the teacher sings sets in motion corresponding strings stretched across the student’s mental and emotional sounding board, sometimes called “heart strings.” This is difficult, perhaps impossible, to achieve via the distance of the digital medium, and yet it is key to the practice of Waldorf education. As one Waldorf 12th grader I once interviewed put it, “I get it: Waldorf education is a process of *extracting* students’ insights rather than of *inserting* the teacher’s knowledge into them!”

In brief, the case for teaching online rests heavily on its undoubted convenience, efficiency, speed, economy, and accessibility. However valuable these considerations may be in matters of instruction, they should not be the deciding factors when it come to education. By design, education is *in*-convenient, *in*-efficient, slow (the very word “school” goes back to a Latin word meaning “leisure”), costly, and, yes, restrictive, in the sense that it presupposes prerequisites, previous experiences or credentials. *Access to education*—fair and open as a human right for all—should not be confused with *accessibility to education*, which (as every college applicant knows) is earned, not guaranteed.

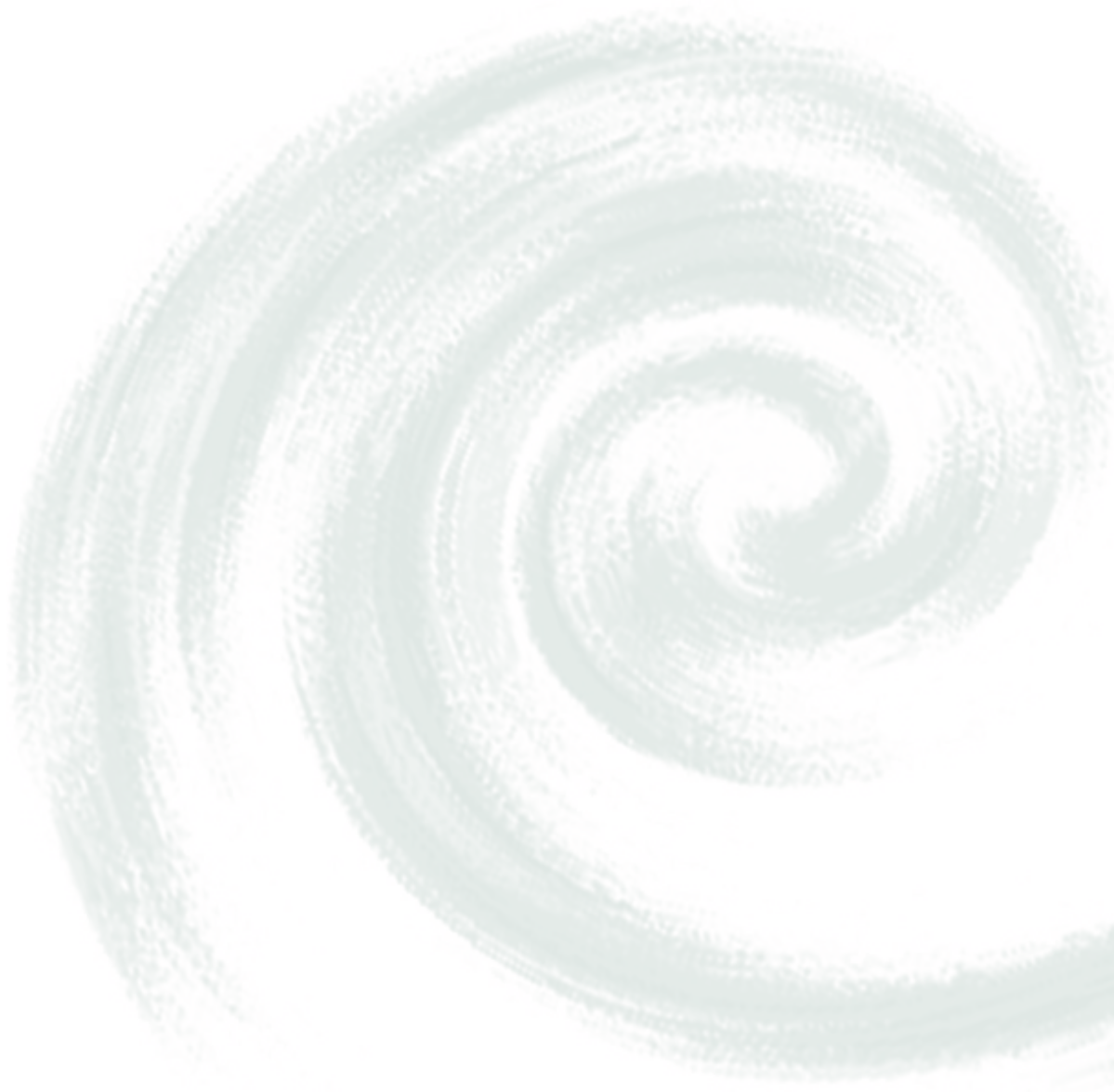
To be sure, we can expect—more, we should demand—that certain aspects of online learning will find

their way into whatever new vessels of education we have yet to envision and eventually construct in future post-pandemic times. Indeed, it would be a tragedy to revert to former ways of learning and remain deaf to the call today for radical innovation and genuine transformation of pedagogical practices and structures

into new forms as yet unimagined. But to adopt digital online formats as the primary new paradigm for learning would be to impoverish education by recasting it as little more than instruction. It would be akin to recasting lifeboats as quasi-permanent houseboats.

Without question, lifeboats provide invaluable transitory service in times of crisis, such as we still experience today. As its name suggests, a lifeboat is designed to save lives, but it is ill-equipped to improve them. For that, we need a pedagogical vessel—an educational home—imbued with a much richer cultural and social and humanly-centered environment. Lifeboats do not make good houseboats.

Douglas Gerwin, PhD., is Executive Director of the Research Institute for Waldorf Education (RIWE), Executive Director of the Center for Anthroposophy (CfA), and Chair of its Waldorf High School Teacher Education Program (WHiSTEP). In addition, Douglas is a Visiting High School Teacher in life science, history, literature, and music; lecturer and mentor to Waldorf high schools across North America, and Adjunct Professor at Antioch University New England.



When the River Ran Dry

Personal Reflections on a Professional Moment

Caroline Martin

The second weekend of March 2020 saw a fabulous occasion unfold at the Rudolf Steiner School in New York City. It was when our Upper School students put on a dazzling show with their outstanding rendition of *In The Heights*, transporting us all not only to Broadway, but back into our own childhoods, and into our parents' childhoods, as the musical tale of immigration to Manhattan was retold. Sunday night's closing performance was emotional, particularly for our seniors, whose own paths out into the world were so appropriately illuminated by those of the story's young characters. We teachers left the auditorium with a wonderful combined sense of nostalgia and hopefulness that beautifully blended the pride in our pasts with the potential in our students' futures. It was a moment in time that not one of our community will ever forget.

We came to school on Monday, the 9th of March, much as usual, but there was mingled with the levity over the weekend's jubilations a creeping foreboding for just what the imminent, but as yet impalpable, East Coast sweep of the pandemic would demand of us. It started with the alert that one of the audience members at the weekend performance had tested positive for COVID-19. With no map for just what to do upon exposure, we found this news to be more of an augur for just what geometrical permutations social distancing would impose on our perspectives, as the precise location within our auditorium of the infected individual was shared in an email marked "urgent." By Thursday, the 12th, the plug was pulled, and although we didn't know it at the time, the doors to our school would remain shut by state mandate for the remainder of the school year. What would have been a purely joyous week as we approached our much anticipated Spring Break, was instead another moment in time—this, one of a very different quality—that not one of our community will ever forget. Instead of pride over what was and optimism over what was to come, the spectrum of feelings that pervaded our atmosphere ranged from uncertainty to fear.

Despite the impending cataclysm, the weekend of March 16th proceeded as planned. My family and I drove 50 miles upstate for the Maple Sugaring Festival at Long Meadow Waldorf School, and celebrated St. Patrick's Day with friends in typical expat fashion.

There were one or two notable absences from these traditional gatherings, and a few cynical remarks about the virus, but otherwise we made merry. So much so indeed that we stayed an additional night, deciding to brave Monday morning rush hour for the sake of a few bonus hours with our pals (little did we know just how big a bonus it would turn out to be). The rental car had to be back by 10am, so we budgeted an extra hour and sped off by 8am.

It was at some point along HWY 4 that the paucity of traffic became eerie, but even this did not prepare us for the ghostly city we entered as we rolled off the George Washington Bridge and made our way unimpeded down the Henry Hudson Parkway. It was a sunny morning, with glistening crests dancing seaward along the river, but the water's advance, made spectral by the strange stillness, was more a harbinger of drought than a symbol of plenty. As we reached our apartment and turned the inner latch behind us, our walls closed in, and in that very moment, we physically, mentally, and emotionally went into lockdown.

Two weeks of Spring Break and one of rapid assessment and formative action would pass before my official duty would resume, but in what format, across which medium, to teach what and to whom, none of us fully understood; we did not, perhaps, realize the extent to which we were in a state of shock. Some of our families were clearly in distress, their lives, or at least their outlooks, turned upside down, and supporting our students' wellbeing took on the deepest meaning. As Waldorf teachers we knew that this was our time, that this crisis was exactly what we were trained and compelled to brave. Thus we did what we do best; in the same breath by which we re-shaped lessons and schedules, we shared our impressions and understanding of our students' inner worlds, keeping their welfare at the forefront of our endeavor.

We decided on Zoom as the virtual medium that would keep us connected and our classrooms intact while we adhered to and grew used to physical distancing. Very early on, mostly through faculty meetings with one another, we learned that collaboration was taking on new important meanings. There would be fatigue associated with the screen, but also practical difficulties in

running the platform while teaching. Having an additional teacher would make monitoring waiting rooms and break-out rooms and student requests more fluid and thus less disruptive to the lesson. Plus, collaborative support would also serve us more fundamentally, in alleviating our own feelings of isolation.

What broad constraints were most important we laid out:

- Screen time would be minimized
- Movement would be essential
- Outdoor activity would be gently encouraged
- The immediate home and local environment of the child would, as much as possible, be part of the lesson
- Now more than ever it would be vital to collaborate with parents and siblings

We also anticipated that the drastic and sudden change to both the learning and the teaching environments would be better served by collaborative instruction. The classroom or the laboratory was no longer a teacher's domain for the duration of the lesson. Instead, it was a living room or a bedroom or a kitchen or a bunkbed, a space shared with others not officially belonging to the class. Likewise, the outdoor spaces available to our students ranged from city blocks to farmsteads. Pooling together different teachers with different voices and skills provided individual students with a fuller sense of unity with their new learning environments.

In an effort to bring teachers and students together more meaningfully and in ways more appropriate to the new and varied learning environments, we reduced the number of remaining Main Lessons while extending both the duration over which each would be taught and the breadth of subject matter that each would encompass. For example, we formulated a new tenth grade Ecology Main Lesson with instruction to be given by three teachers from the science and math department. During this course, we had students make observations of their immediate environments by keeping a notebook, but we united geology, soil science, botany, geography, biology, and chemistry, from the uniquely different vantage points (backgrounds and foregrounds) of the three teachers. During the Ecology Main Lesson, there were moments of harmony across such varied landscapes as those that we each occupied that will forever influence our teaching for the better.

Another highlight was the Kitchen Chemistry course that we offered, both as an elective for the eighth grade and as a seventh grade Main Lesson. The kitchens of participating students became home laboratories as students collaborated with their parents on shopping lists to supply their inventories. Using sugar, vinegar, salt, ice, eggs, oil, natural dyes, gelatin, and more, this course brought to light the wonders of everyday chemistry. More fundamentally, it gave the students a sense of place and purpose in their own homes at a time when feelings of isolation were overwhelming. Through the course, we were welcomed into each other's homes at a time when this is exactly what we all needed most.

It was inspiring to see the scope and creativity of the new elective courses that we offered, all intended to meet the students in their isolation. Some courses, like those described above, were founded on embracing the simplicity of what is before you, on stripping back abstract theory, and on allowing spiritual connection through the practical. Other courses, such as a new reading seminar with the tenth grade, in which we took up Stephen J. Gould's *Wonderful Life*, with its focus on the ineffable questions of life's origins, gave conceptual escape to the students in their physical confinement.

With the juniors and seniors, it became apparent that there was comfort in academic rigor, with some students exceeding their past performances as the spirit of teamwork took over. And perhaps the icing on the cake was being more fluidly able to offer placement in advanced classes to students in lower grades, and indeed in different time zones.

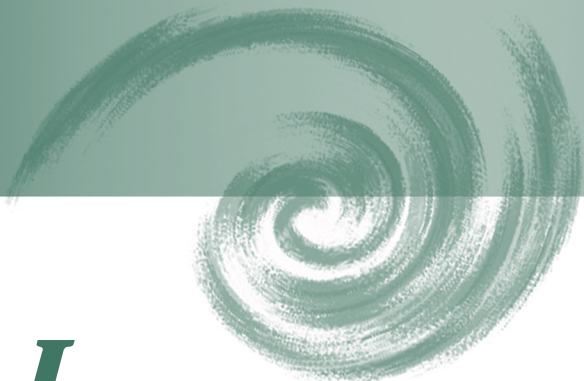
The river may have run dry but our task was now not to idly watch as the waters returned, but to venture forth and map the bed.

There were lows, too, but these were mostly caused by fatigue. What stood out more was the palpable gratification that pervaded the atmosphere at the beginning and end of all faculty Zoom meetings. The moment when the familiar faces of those with a shared purpose popped up on the screen was a comforting realization that we were all in this together. And when we signed off there was a tacit acknowledgment that yes, the river may have run dry but our task was now not to idly watch as the waters returned, but to venture forth and map the bed.

Caroline Martin, PhD. *An Irish national, Caroline Martin began teaching chemistry at the Rudolf Steiner School in 2019. As a parent of two young daughters, she was drawn to Waldorf education to support their*

healthy growth and development. Before teaching at Steiner, Caroline studied geology at the National University of Ireland, Galway, and in 2013 earned her PhD in geochemistry from the University of Cambridge. Caroline also studied at the Lamont-Doherty Earth Observatory of Columbia University and at the Woods Hole Oceanographic Institution, where she was a Fulbright scholar. Outside of the classroom, Caroline can be found wading in rivers, swimming in cold coastal waters, or immersed in Victorian fiction.





Changing Course

A Report from the Seventh Grade

Steve Simonak

Like so many others, the seventh-grade students of the Brooklyn Waldorf School were cast into a new world on March 11, 2020. We all thought that our classroom expulsion due to COVID-19 would be for a few weeks – an extended Spring Break perhaps? But we were wrong, the class I had been with since grade four took a deep dive into the cyber world, meeting almost every school day until the end of our school year on June 13th.

In just a few weeks from the time of this writing, my class will begin eighth grade. While we are geared up for a return to “in person” classroom learning, I prepared my classes to the idea that online learning may make its return at any given moment.

This is a brief picture of what we as a class were able to do during our three months of virtual classes in the spring of 2020. It should be noted that my class, although composed of somewhat sophisticated city dwellers, was mostly free of screens at the time of the change. We had (or perhaps still have) three *Fortniter*s (students who play the online game *Fortnite*), and, although the practice is strongly discouraged by me, I assume that bad habit still continues. The other sixteen students were mostly free of major screen time prior to our shift to distance learning. It was, therefore, for most students a deeper dive into the internet in a major way. My Main Lesson was approximately an hour long, running from 9 AM to 10 AM. We shared one other period that met intermittently three times a week. Students were also expected to meet three times a week with the math teacher, two times a week for both language classes, and once a week each for Orchestra, Chorus, Test Prep, and Cyber Civics. (Early on, we’ve learned that we needed to require all students to be visibly on screen throughout each class).

Initially continuing the Explorers block that was already in progress, it became clear after observing the students each day that they needed to write in a different way than the one practiced previously, and that they needed to see and share their surroundings. We had already completed the ‘Wish, Wonder, and Surprise’ creative writing Main Lesson, but I revived an observation component from that block and began by writing a short descriptive piece about what I saw from the

windows of my Dyker Heights apartment, in Brooklyn. I shared my writing and asked the students to use some techniques we had recently learned to describe in detail what they saw from their respective homes and apartments. This proved to be quite a successful assignment, as students shared their work and gave everyone a very clear picture of their isolated world view.

Luckily, the New York spring was blossoming, and it became clear that turning our gaze to the natural world was needed. As a birdwatcher for many years, I noticed the return of many familiar avian species. Expecting the students to use PowerPoint skills as part of their future Eighth Grade Projects, I created the Birding Project. Although not quite part of the seventh-grade curriculum, this project was born of the realization that the students needed to exit their rooms and begin to observe the outdoors. (Students whose parents preferred that they stay indoors had the option of observing and working from their windows or backyards.) The task was for students to observe and record as many species of birds as possible during the month of April. Their ‘bird list’ was to be included in their PowerPoint presentations, laying out their research of a bird of their choice that was indigenous to the area in which they were living. My initial thought was that all reports would be on birds nesting in the Brooklyn area, but several of my students had escaped the city and were as far away as Montana, Connecticut, and Vermont. I, too, participated in the bird search and research and reported my findings on a daily basis. I included many photographs, which I presented at the beginning of the Main Lesson. In early May we devoted several Main Lesson classes to the online project presentations.

Because we were so engaged with computers, I chose to give over my extra Main Lesson classes to the study of computer programming. This work was originally planned for eighth grade, but as we were forced to spend time in front of the screen, it made clear sense to offer the children some insights into the machines we were using daily. We studied the basics of Python Programming. Students were given an introduction to several concepts from the world of computer programming and then asked to create and submit programs, which I reviewed and later shared with the class. For our final assignment, each student was asked to create

a Random Sentence Generator, which made use of the many grammar concepts, which we had studied over the years, and of their new-found programming acumen.

Another assignment that was extended over the last months involved the creation of a comic book page. I had planted the seed for this earlier in the year, when I required students to design and create a Main Lesson book page in the format of a comic or Manga book. Originally, this page format could be included in any of the blocks planned for the year. Some students chose to write and illustrate a comic book story for the 'Wish, Wonder and Surprise' Main Lesson. Now, during our isolation, I decided to make it mandatory for all students to design a comic book page that illustrated life at home during the pandemic. There were many parameters for this piece, one of which was the requirement that the students use some form of perspective drawing (our first Main Lesson block in September) in their design and that they include in their presentation a character that represented themselves. The results of their work were superior. The children took a step back and created a bird's eye view of themselves and their surroundings. In many cases their views offered true self-portraits and clear reflections on the situations and the environments in which they found themselves.

All this work included meeting hard deadlines for all assignments, by which the students were expected to photograph and submit finished pages to online folders. (We always work on single pages that are later compiled into a single book.) In June the children laid out all their Main Lesson book pages on the floor and photographed or filmed the finished work. During the summer I drove around Brooklyn, stopping at many of my students' homes to pick up their completed Main Lesson book pages; other students sent in their work by mail. The first task for our "in person" classes will be for each student to sew together and bind these pages into a single book. The first page of the book will feature their comic book self-portrait.

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The Experience of Distance Learning

Meeting the Challenge and Preparing for the Future

Karen Atkinson

Last spring, in response to the COVID-19 pandemic, children across the globe were sent home to shelter in place. Our schools in North America, along with all the other public and independent schools worldwide, were asked to transform their in-person approach to educating our youth in order to meet the needs of our students at a distance. For many Waldorf schools, this was also a philosophical concern, as we have historically recommended that children, especially young children in the early childhood and lower grades (1-5), maintain a lifestyle as free from electronic exposure as possible. We strive instead to provide children with the opportunity to learn through direct experience, imbued with a soulful delivery and an artful sense of feeling. In addition, at the very core of Waldorf education is the ever-important element of human connection: the recognition that each student who stands before us is filled with tremendous beauty and wisdom, ready to learn from a loving authority, their teacher.

How, then, could we as Waldorf educators imagine teaching at a distance, using an eLearning management system? How would it work? Would our lessons be synchronistic or asynchronistic? What platforms would we use? How could we maintain a sense of warmth and cultivate a connection with our students and parent bodies without seeing them in person? Was it even possible to teach the Waldorf curriculum at a distance? These are just a few of the questions that Waldorf educators grappled with at the onset of the pandemic.

From my experience teaching in the lower school this past spring, and from teaching adult learners at Sunbridge Institute this past summer, I can affirm with a resounding 'Yes!' that eLearning management systems can serve as a successful way to connect, inspire, and teach Waldorf education to children and adults. My first choice would always be to teach in person, but we now know that online learning is possible and even a successful option for many students and families.

Distance Learning in the Lower School

When preparing for distance learning, I identified two main pedagogical goals: I wanted to cultivate warm connections with my students and inspire them to be interested in learning. In addition, my objective was to provide guidance and support for a healthy

social-emotional life for each student, while continuing to build upon the foundations of numeracy and literacy. Another important goal was to provide the inspiration needed to help each student connect with the natural world.

It was important to recognize that learning at school and learning at home are different experiences. Inspiring young children in the lower school towards self-education opportunities was a priority when planning for distance learning. More importantly, I realized that most children in the lower grades were going to need the guidance and support of a caregiver at home, in order to successfully navigate their way through this new experience in learning.

There are countless fun ways for children to learn on their own or with a family member. They can play math games, word games, and classic board games. They can help in the garden and cook in the kitchen. They can learn how to care for the environment of a home and yard. They can engage in handwork activities. They can color and paint. They can also create images with beeswax, clay, and mud. And they can dance and do yoga with their siblings and parents. Time in nature, building forts, fairy houses, and gnome homes are a magical way for young children to spend their days, and so is observing a living plant, then sketching it and writing a poem about it. Telling and hearing stories, then acting them out offers fun for the whole family. Woodworking activities and research projects are an excellent way to engage students of any age. The possibilities are actually endless. By reexamining our pedagogical approaches and maintaining an open mind to alternative possibilities, Waldorf teachers were offered an opportunity to find interesting and inspiring ways to educate children.

New concepts and practice lessons were taught by way of synchronous and asynchronous tools and communicated in learning management systems such as Google Classroom and Zoom. On many days, Main Lesson bookwork took a backseat, as I recognized that they did not have to be the primary focus when learning at a distance. It was more important to create meaningful experiences and artistic projects that children could engage in at home.

What Made This Successful?

First and foremost, it was important to work collaboratively with colleagues and administrative staff in order to cultivate an approach to distance learning that was unified. Once eLearning platforms were agreed upon, it was important to train the faculty on how to use them. Both my school and Sunbridge Institute chose to set up Google Classrooms for each grade and for each early childhood class and adult student cohort. Teachers could then post assignments and projects, complete with photographs, audio files, and videos of themselves teaching a lesson, telling a story, or leading an activity or project. These were considered asynchronistic lessons, because the teaching act and the learning did not take place at the same time. Asynchronistic lessons and activities are prepared in advance and posted, while students and adult learners have the freedom to engage with the work or experiences at a time that fit their personal schedule.

Synchronistic lessons, wherein the act of teaching and the learning take place at the same time, were also offered daily at my school, with live lessons through Zoom for all grades, though the duration of a Zoom class varied from lower to upper grades. Having the opportunity to check in with our classes each day was essential. Seeing the students and the students' ability to see their teacher made for a comforting, rhythmic learning experience each day. I personally found the daily live lessons to be an excellent experience for both me and my students. However, this didn't "just happen." The successful experience was a result of many elements that were put in place prior to meeting with the children, ensuring that our time together would be meaningful, imbued with beauty, and providing an inspiring opportunity to learn.

Meeting with the parents of the class virtually each week was essential for creating the live Zoom session experiences for the children. Providing the parents with an overview of the week, coordinating the delivery or pickup of all the necessary materials that the children would need, and outlining virtual learning behaviors and expectations was crucial. In some cases, children in the lower grades needed their parents to be present during the live Zoom session, but some children were perfectly capable of following along and engaging in the lesson on their own. They learned quickly how to navigate the mute button and understood how virtual learning worked.

Making each synchronistic morning lesson fun, interesting, and engaging was essential to its success. Cultivating a sense of soul warmth through distance learning was not easy, but also not impossible. Prioritizing time to connect with each student at the start of each day, followed by the power of rhythm and routine, imbued with interesting content delivered through the magic of storytelling—all allowed each abbreviated morning lesson to flow. Engaging in an artistic activity together was rich and satisfying.

The most important element during distance learning was the time allotted for individual meetings. Each week, the teachers at my school took the time to meet individually with each of their students. Durations varied depending on the age of the student, but the overall experience and outcome was extremely positive. Students could use the time to ask clarifying questions about assignments or projects, and teachers could use the time to check in and connect on a deeper level with each student. At the end of the school year, individual meetings were an excellent way to assess learning, and thus end-of-year reports could be written with ample content, despite the fact that we had not seen our students in person, without technological mediation, for over three months.

What Were the Challenges?

Becoming familiar with eLearning management systems such as Google Classroom and Zoom, as well as understanding which lessons were better suited to synchronous and asynchronous learning experiences, certainly required time, trial and error. However, once the basic technological hurdles were out of the way, finding new and exciting ways of teaching, presenting, and engaging students became a daily creative challenge and an exciting opportunity to bring something fresh and different to my students.

In addition to each teacher having to navigate his or her own way through distance learning and eLearning management systems, it was important to understand which students and families needed technological support, such as access to WiFi service in their home. Some families were equipped with only one computer or tablet to

be shared amongst siblings and even parents striving to work from home. In such cases, it was our task to make sure that each student and family who needed equipment was provided with the necessary tools for learning from a distance. Next came the challenge of

We strive instead to provide children with the opportunity to learn through direct experience, imbued with a soulful delivery and an artful sense of feeling.

staggering morning lessons and coordinating special subject classes based on the students' and their families' technological availability. This did not make the task impossible, it was simply part of what needed to happen in order to meet all the students. As educators, we maintained the intention to remain connected with our students while inspiring them to want to continue learning. Creating a schedule that worked for the entire community was a challenge, but not an impossible task to coordinate.

Another challenge of teaching virtually, especially in the lower school, was to meet the needs of our students who struggled in the classroom with attention or learning differences and who now found it even more difficult to pay attention and stay on task when sitting alone, in front of a screen, in their homes. Without the physical presence of a teacher's guidance and the non-verbal cues so often used for redirecting and helping students to stay on task, some children simply could not maintain focus. In such cases, weekly individual meetings for students with learning differences was a successful way to help support their learning and keep them on track.

Preparing for the Next Round

When we first entered into distance learning, it was in response to an emergency situation. Parents did not sign up to be teachers at home and the teachers did not have adequate time to prepare their students for learning through a virtual device. Now, however, we know that teaching through learning management systems, whether it is through a synchronistic or asynchronistic approach, will definitely be a part of how we educate our youth in both the near and far future. Important lessons learned from this experience include the essentiality of daily live lessons and the great importance of individual meetings with each student. Future online teaching, I realized, would benefit from more projects that students could engage in over a period of time and own their own. It could also be strengthened by holding each student accountable for completing her or his work on a daily basis.

Presently, I am preparing both an indoor and outdoor classroom for my second graders who will be attending school in person. I put aside the beautiful baskets traditionally used for storing each student's personal items, and I replaced them with plastic shoe bins that can easily be washed and sanitized. Every bin will contain the essential elements needed for each student to learn and engage each day. Crayons, colored pencils,

scissors, a sharpener, a bean bag, a jump rope, a gem bag, beeswax, yarn, sensory toys, and hand sanitizer are some of the many items to be contained and utilized by each student, individually. This way, if we have to switch to distance learning, each student will simply take his or her bin home, having everything a student needs to engage in our work at home. On campus, students are now able to contain their own materials and

carry them from our outdoor learning space into the woods, or next to the stream, and enjoy learning outside, in the fresh air, bathed in sunlight and surrounded by nature's beauty.

Receiving the children with warmth and cultivating a safe environment in which they can learn is my number

one goal. How and what my students learn are certainly important factors, but not as important as making sure that I am guiding them towards being morally-guided citizens who are capable of imparting meaning to their lives and the lives of others. At school or at a distance, I think this is a shining moment for Waldorf education. If anyone can succeed at providing our students with an education, imbued with love, warmth, and creativity through eLearning management systems, it is our Waldorf teachers!

Karen Atkinson, M.Ed., a class teacher at the Waldorf School of Princeton, has been a Waldorf educator since 1995. In summer, she is a teaching instructor for Waldorf educators, leading courses and providing teachers with insights and inspiration for planning their year ahead. In addition, she has served as a mentor and consultant, for individuals and schools, for over two decades. She is currently serving her second term with the Leadership Council for the Association of Waldorf Schools in North America, representing the Waldorf schools and institutes throughout the Mid-Atlantic region.

Teaching Stripped Down to Its Essence

Selim Tlili

Teaching, like many modern professions, has suffered from “concept creep.” A swarm of demands chips away at our time and our primary mission: we are part-time advisors, administrators, club chairs, and writers of college recommendations, and we have to teach in between all these demands! Turning to teach from home due to COVID-19 stripped away most of those duties that one might consider to be important to the functioning of a school but non-essential from an educational standpoint. The reality of not navigating a shared space and of teaching from home via Zoom forced all of us as a school community to examine what is the core of value that we offer to our students.

The ninth-grade physiology Main Lesson that I developed over the past five years as a Waldorf teacher emphasizes homeostasis and the adaptability of the human body; it explores how neurons strengthen myelin sheathing to allow electrical impulses to travel faster to perform activities that we perform frequently. We talk in class about how muscles grow when they are placed under tension. We explore the concept of the immune system and how exposure to antigens causes our body to adapt. Students generally find my class to be interesting, but ninth graders usually require me to spend a significant amount of time keeping them focused on the class instead of on each other.

In the spring semester of 2020, with classes retreating to the dimensional space of the Zoom platform thus eliminating the immediacy of peers to directly interact with, a student connected the dots in a beautiful way when she said, “Mr. T! It seems like we need to not be, like, totally always safe all the time because it can kinda mess our body up if we don’t test it.” In the most clear and accessible way that everyone could understand, this student independently discovered the concept of hormesis—the idea that exposure to certain things at low doses can be beneficial, while exposure to higher doses can be harmful. Most years I have had to guide students to that conclusion with a bunch of leading questions that force them to connect the dots, but not this time. The student’s well-expressed realization led to a wonderful discussion about the trade-offs between risk and safety and human resilience, a discussion that, in my humble opinion, needs to be had by everyone.

I would write this off as the insight of just one gifted student if I hadn’t experienced something similar in my junior botany class that took place the following month. In botany, the focus is on overcoming “plant blindness,” a phenomenon that is common in modern society, where we all collectively ignore the uniqueness of plant life. Towards this goal, of regaining our attention to the plants that surround us, students’ grades were determined by how many plants they observed and sketched in their botany journal. The students were tasked with looking for and at plant life and asking some key questions:

- What unique physical features do I observe in this plant?
- What do I observe that makes this particular plant as unique as I am?
- How might those features help to either increase the probability of survival or increase fecundity?
- What kind of trade-offs is the plant making to survive in its environment?

These open-ended questions allowed students to hypothesize and make educated guesses based on what they know. Ideally, these questions force students to view plants less as a proverbial sea of green that is simply there and more as a community of unique individuals that are operating symbiotically to grow, compete, thrive, and protect themselves from the vagaries of life and nature. The nature of the questions allowed for various levels of insight and speculation, which depended on the level of work students were willing and able to put into each observation.

Many students and parents wrote to me to report what a gift this class was to them. For the first time in my career, both students and parents expressed genuine appreciation for the kind of work I gave them. By being encouraged to go outside and search for plants, many of the students found the courage to leave the sanctuaries of their home and do some exploring. Some of the students had not gone outside for months out of a vaguely held fear of catching COVID mixed with the uncertainty of what that meant. My botany class gave these students a concrete reason to go outside. Some students kept their mask and gloves on, and some students did not. Either way, once they were outside

and focused on observing plants and capturing those observations in their sketchbook, they found that their fear of COVID mostly dissipated.

One parent of a very quiet student told me how enthused her daughter was about exploring the world around her. The student invited her mother to go on explorations with her—a shocking move given that she was usually rather closed off about school with her family, as is common with adolescents. When the new school year began after a COVID summer, that student sought me so she could report, enthusiastically, about how she spent the whole summer looking at plants and asking herself the questions I posed to the class. The student described herself as “not a science person,” but she now decided to take the advanced biology class, partly out of the interest she discovered while exploring the world around her for this Main Lesson. I can’t think of a better outcome for a class than to know that it made someone become a little more curious about the surrounding world.

I suspect that the transformed nature of school, where lots of distractions and “noise” have been eliminated from our lives, made its impact. In the COVID semester of learning from home, students were less occupied with peer related drama, stress about college, pesky teachers, clubs and after school commitments, and all the other stresses that come with a full schedule of a city adolescent and the encounters in the school building. I believe that removing these factors from the students’ lives allowed them to truly see certain signals that they might have otherwise overlooked in the day to day busyness of school.

During the summer that followed a trimester of teaching-by-Zoom, I spent a lot of time thinking about how to maintain the positive clarity that less school time has brought to my educational domain. Should we have fewer class sessions? Should we consider fewer class periods in a school day? More time with students will allow for greater depth of content and the fortuitous discussions that can result from their questions. The flip side of the return to in-person classes is the increase of noise in their lives—commute, distraction, multiple interaction—which could hamper their ability to uncover the most valuable insights that comes from silent observation and that can be truly transformative. Like in the lives of the plants that the students explored,

there are trade-offs that we need to understand.

Preparing for the new year, I found myself hopeful that the fall plans to spend more class time outdoors will allow students to continue searching for patterns while encouraging greater resilience. With a new academic year beginning with an interesting hybrid of in-person and online learning, I was optimistic about the communal effort to find ways to continue developing the potential strengths that online learning can offer while still taking advantage of the wonderful opportunities that come when people come together in a shared space with a sense of community and a common educational mission.

We began the school year with the botany Main Lesson. Half of the class goes out at 8am to do landscape drawing in Central Park with the art teacher and then, at 9:00, switches roles with the other half of the class for an indoor lesson. When they come into the classroom

from the park, the students continue their observations of plant life by placing under the microscope the samples they bring from the park. They then draw cross sections of stems, leaves, roots, and flowers and see how all of these distinct structures cooperate to keep the organism alive. Students who have never once expressed any interest in biology are finding that seeing things is fascinating.

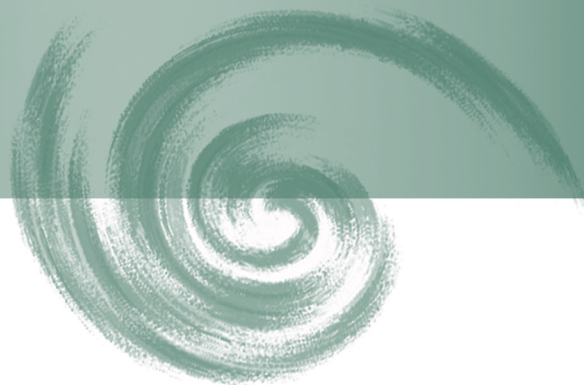
How will this continue for classes in the wintertime? Will student

enthusiasm remain when it gets too cold to go outside? It is too early to tell. Regardless of how this continually evolving experiment plays out, I am appreciative of the insights into teaching that I have gleaned from such a vast change in conditions and I’m even more appreciative of the insightful strength I had the privilege to observe in my students.

Selim Tlili taught in the NYC Department of Education for 11 years before joining the Rudolf Steiner School in New York as a science and math teacher. He earned a Bachelor of Science degree in Biology from SUNY Geneseo as well as a Master’s in Public Health from Hunter College. He is currently working on a Master’s in Liberal Arts degree, in English Studies, through Harvard University’s Extension School.

A Year of Online Teaching

Jamie York



I am not a seer who predicted the pandemic and the response that sent a world of teachers into the uncharted waters of web-based learning. Still, many people have since asked me how I had the insight to launch an online Math Academy for students (in grades 5-12) just six months before the pandemic hit. I can only say that I had great fortune – at a time, sadly, when so many others have been struck with great misfortune.

Unsurprisingly, the last year of teaching via my computer has been an enormous learning curve for me. Surprisingly, I can now look back and honestly say that it has been my most successful year of teaching in my 35-year career – measuring success largely by my students' enthusiasm and the development of their thinking. My intent in this brief article is to share some observations and offer modest advice to those who find themselves needing to teach online. While my experience is with the teaching of mathematics, I believe that most of this also applies to other subject areas.

Let me preface this by saying that I consider myself a Waldorf educator through and through. Both of my children were gifted with a remarkable journey through the grades of Shining Mountain Waldorf School in Boulder, Colorado, where I also taught for 21 years. Karen van Vuuren—who is my wife and an end-of-life-care visionary—and I shielded our children from all screens through middle school. It was only in eighth grade that we allowed them computer access, which began with (what for them was) the thrill of taking a computer-aided typing course. Certainly, they witnessed both of their parents interacting frequently with a computer as I wrote my *Making Math Meaningful*[™] curriculum books and Karen edited her documentaries. I know well how media exposure and screen time affects our children developmentally, and how it can diminish and deaden their imagination and weaken their thinking capacities and etheric forces if it is left unchecked. I am also aware of the need to balance online learning with extra-curricular activities that support social and physical wellness.

Yet, in retrospect, I now realize that my views on technology were dogmatic and limiting. Not all technology is evil – not even the technology aimed at children. Using a computer to watch your teacher tell the biography of

Julius Caesar is not the same as playing a video game. Solving a math puzzle with a friend via Zoom is not the same as watching an action movie or surfing the internet without adult supervision. At the same time, there is no doubt that once we open this can of worms, we need to be vigilant. We need to ensure that we protect young people from the negative aspects of the technological world. It is possible for children to wisely use technology for the benefit of their education, and at the same time develop in a healthy manner, as long as we simultaneously encourage them to experience the wonders of the world around them.

My first foray into teaching students online (I'd already been offering online teacher workshops for a few years) began last summer at the behest of a European Waldorf homeschool mother. I was very skeptical. How could we possibly teach effectively via a computer screen when genuine human connection is at the heart of a meaningful education? Early on in planning the Math Academy, it was clear that I needed to structure the math courses differently than I would in a traditional classroom.

I was aware of empirical evidence from studies indicating that most online learning was unsuccessful. Research has shown educational videos—even a video where the students report that the presentation was interesting and clear—often are not effective in teaching a concept¹. Why is this? What I have come to believe is that as human beings, we are pre-dispositioned to “go to sleep” any time we are in front of a screen for a length of time. This “screen-doziness” happens when our thinking switches off and we become passive observers.

Reflecting on the research, I wondered: How could I possibly create a successful method for teaching math online? To answer this question, I first needed to identify the pitfalls of online learning. For starters, how many of us have heard students of any age (my own son in college, for one) complain about their uninspiring online classes? What's behind this common complaint? I'd say two interrelated aspects: the lack of direct human connection, and excessive lecturing by the teacher.

1 You can learn more by watching a YouTube video entitled “Khan Academy and the Effectiveness of Science Videos.”

On the basis of my recent experience, here is some advice: *When teaching online, we need to severely limit the amount of “Teacher Talking Time.”* I like to tell myself that, when teaching students online, I have to “snap them awake” every five minutes. Additionally, *we need to find multiple ways to have students regularly connect with one another.* In an online educational world, students hunger even more to connect with their classmates.

Before I share some other tips, let me return to my statement that this past year has been “my most successful year of teaching,” and then I will tell a story. (Which Waldorf teacher doesn’t enjoy telling a story?)

When I speak of the success I have found teaching online, I am not claiming that online teaching is superior to in-person teaching, or even that I prefer the former to the latter. Indeed, I miss many things about the traditional classroom. I am simply acknowledging that I saw many reluctant mathophobes emerge as engaged and enthusiastic math-happy students. And I have never before seen my students make such impressive progress in developing their ability to think mathematically. What made this possible? Largely, it was how I structured my program.

In a conventional classroom, we can fairly easily float from one activity to another—a bit of lecture or a story, then some artistic activity, some group discussion, perhaps a brief assessment. Teaching in this kind of fluid and/or spontaneous manner seems much more difficult online. So, I knew I had to consciously build a healthy rhythm into the structure of the week. Two days per week, my students watch a recorded 40-minute lecture. Each lecture was “active” in that it required the students to tackle mental math problems and various practice problems. But to be perfectly honest, if my whole program had only consisted of students watching lectures and working on math homework problems, then my Math Academy would have been an abysmal failure.

Now, here is my story—an experience with a fifth-grade class that I now consider to be one of the greatest highlights of my teaching career. (Warning: There is a bit of math here, but I’ll present it in a way that anyone, with effort, can follow along.) Towards the end of the year, we were in a block I call “The Wonder of Number.” I was asking the students to figure out a way to write a given odd number as the difference of two square

numbers. (The square numbers are 1, 4, 9, 16, 25, 36, 49, etc., each one being a whole number times itself.) The exercise was as follows: I give the students an odd number and ask them to write it as the difference of two square numbers.

Example: Find all the ways to express 15 as the difference of two square numbers.

Solution: 15 can be expressed as the difference of two square numbers in two ways: either $16 - 1$ or $64 - 49$.

You might wonder: how did I expect the students to do this? I figured that they would look at all the square numbers and, through “trial and error,” keep trying different possibilities until they discovered which two square numbers subtract to 15. Fifth graders love this kind of “looking-for-a-needle-in-a-haystack” challenge.

I have never before seen my students make such impressive progress in developing their ability to think mathematically.

But then something unexpected happened. After one group work-session, a parent in the class emailed me to ask: “Don’t you need to review factors before doing this?” I had no idea what she was talking about, so I responded with, “What does this have to do with factors?” It slowly came to

light that these fifth graders had discovered something completely new – a connection between the factors of 15 and the ways that 15 could be written as the difference of two square numbers! (I’ll leave it to you to try and determine their method.) They had discovered a sophisticated theorem that I did not know existed! They were so proud and felt so empowered! I am convinced that this was made possible because I created the time and space for them to do real mathematics in a group of their peers.

Group work is the “heart and soul” of my program. This is what the students are longing for – connection with their peers. Twice per week my students get together in small groups and engage in meaningful learning—working on math puzzles, solving problems, and discovering mathematical properties—all of this without the involvement (albeit with some supervision) of adults. Never before have my students struggled so much, or discovered so much. Before teaching online, I never felt the need to have my students work so intensively in groups. This group work, I believe, has been the key to my success.

In addition, there were a couple of surprises for me with teaching online. The first is that it is actually possible

for students to experience meaningful, human connection through an online platform. In particular, I receive emails from parents saying how pleased they are to see their children bonding with their group work-partners. Their peer-to-peer collaboration is often the highlight of their math week, resulting in not just friendships, but truly awe-inspiring mathematical exploration and discoveries. This human-to-human element is missing from much online learning, yet it proved a key ingredient in our recipe for successfully delivering our online math curriculum.

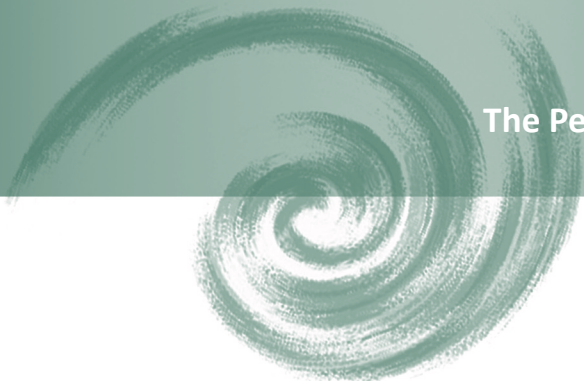
The second surprise is the discovery that I enjoy teaching online. I derived great satisfaction from carefully crafting and pacing my lessons and delivering them. Of course, it was quite different than standing before a group of students and feeling the collective energy of the class unit, still, I found myself living into my students' thinking and I was getting a sense of where they were in the process of digesting what I was bringing. In general, I found more similarities than differences between teaching online and teaching in a physical classroom.

I will end with a summary of my humble advice for teaching online:

- **Stop Talking So Much!** Significantly limit the amount of "Teacher Talking Time."
- **Snap Them Awake** every five minutes.
- **Human Connection.** Find multiple ways to have students regularly connect with one another. Make an effort to connect individually with your students.
- **Compartmentalize Your Teaching.** What can be effectively conveyed via a recorded lecture? What activities or exercises lend themselves to working in small groups? What can just be placed in an individual assignment?
- **Let Go of Expectations** to get through a lot of material. Less is more, especially with online learning.
- **Strive for Balance.** Take frequent breaks from sitting at the computer. Work with parents to make sure their children are counteracting the negative effects of screen time with movement, artistic activity, and spending time outside in nature. Our daily routines and rhythms are more important than ever. All of this goes for us teachers, too! Take this opportunity to develop some healthy habits. Do something joyful. Laugh a lot! Don't watch the news! Sleep well and eat nutritious food.
- **Adjust Your Attitude.** Few teachers prefer online teaching to in-person teaching. However, self-talk about how awful it is, and letting our students know of our distaste for online learning is not likely to help the situation. See what you can do to find the gift in every moment we are together, even if it is mediated by a computer screen.

To sum up, as they say in the world of math: online teaching for me was surprisingly rewarding and successful. With the right formula, the right parameters, and the right positive attitude, I will continue to proclaim that it is possible to make lemonade out of lemons. I've seen it happen.

Jamie York, author, Waldorf math educator, and math missionary, created the Making Math Meaningful™ series as a developmentally-based math curriculum. Its goal is to strengthen basic skills, foster mathematical thinking, and spark enthusiasm for learning. With the Jamie York Press Inc he aims to inspire teachers to re-imagine mathematics and summon the courage to get off the math skills hamster wheel to bring real math to their students.



Assessing Distance Learning

The Perspective of a Veteran High School Teacher

David Sloan

There would be no greater fallacy than to say: "We must rebel against what technical science has brought to us in modern life. . . we must withdraw from this modern life." In a certain respect such an attitude would be an indication of spiritual cowardice. The real remedy lies, not in allowing the forces of the soul to weaken and to withdraw from modern life, but in so strengthening these forces that its pandemonium can be endured.

Rudolf Steiner, "Technology and Art"
December 28, 1914

Until last spring, distance learning had always seemed an alien prospect to many, like bull riding or designing a nuclear submarine or playing the harp. I supposed that a relatively select few were drawn to such pursuits, and by some esoteric means they had managed to acquire the necessary expertise. However, when COVID-19 shuttered the world this past spring, schools in particular, I suddenly found myself joining the ranks of millions of other ill-prepared educators, scrambling to learn in a matter of days the rudiments of online teaching methods. Might Rudolf Steiner have called that leap a modest form of "spiritual courage?"

It's been a rocky transition, especially for a Waldorf teacher who has spent the better part of forty years struggling to understand, and then to implement in his high school lessons, Rudolf Steiner's pedagogical insights into child development. Over the decades I have become, if not a master teacher, at least a practiced one, striving to appeal to young people's longing to be stimulated to think actively, touched to respond empathetically, and inspired to act purposefully.

I have grown to trust my "reading" of my students' daily soul moods more than my hours of preparation when guiding a class, relying on their body language, facial expressions, sidelong glances, and level of engagement to modify the direction of a lesson as needed. I have established a long tradition of beginning classes with playful tongue twisters, as well as group recitations of pertinent poems: Constantine Cavafy's "Ithaka," when

studying *The Odyssey*; Dante's "To Every Loving Heart and Captive Soul," when tackling *The Inferno*; excerpts from Whitman's "Song of Myself," when introducing *The Birth of American Literature*, to name a few.

I encouraged lively debate, respectful discourse, challenging questions. Perhaps most of all—like other striving Waldorf teachers—I aimed to create an environment of collaborative learning which, in its best moments, yielded welcome moments of collective "Eureka!" discoveries.

However, as soon as Maine Coast Waldorf School made the decision to continue spring classes remotely, I quickly realized that I would have to acquaint myself with a Zoom platform that I had never even heard of a week prior to the decision to go online. Zoom links, audio and video options, breakout rooms, chat functions, screen sharing tools, speaker and gallery views, were all as disorienting for a quasi-tech-illiterate as being suddenly transported to another country where all the signs in an unfamiliar language vexed befuddled visitors.

Furthermore, when I conducted my first class, I was struck by the almost laughable incongruity that I was teaching remotely the Medieval story of *Parzival*, a signature course unlike any other in the eleventh grade Waldorf curriculum. When I taught it in past years, the book required students to engage in an unparalleled level of personal reflection and collective grappling with crucial life questions: about parenting, advice-giving, dealing with failure, the role of suffering, what it takes to forgive and to ask for forgiveness, the power of transformation, the nature of *questions* themselves.

Previous generations of students reported that *Parzival* had provided them a window into their own "quests" (noting that every "question" contained a "quest"). They expressed appreciation for the almost intimate symbiosis stimulated by simultaneously burrowing into the book and delving into their own evolving values and beliefs.

Yet, as soon as I found myself confronted by a "Hollywood Squares" series of stacked little rectangles framing the faces of my students, I realized that many

of my hard-won strengths as a classroom teacher would be neutralized. No longer would I be able to rely upon the immediacy of those sometimes subtle, in-person cues to make mid-lesson shifts. No longer could I count on detecting a growing restlessness "in the air" during a class or an introverted student's subterranean query waiting to be prompted. I felt blindered, hamstrung, ineffectual.

Thankfully, during this initial foray into Zooming, the students themselves became the teachers, at least in terms of the technological adjustments I needed to learn. Most were remarkably patient as they instructed me how to assign them breakout rooms and how to use screen sharing for our mutual benefit. Unfortunately, they could not help me on the multiple occasions when the screen froze due to my "unstable internet connection." Nor could they rescue me from the unforgettable ignominy of finding myself locked out of a Zoom class entirely when I unintentionally left—not just a breakout room—but the entire meeting. It took me twenty frantic minutes of metaphorically pounding on the door to get back in before I discovered that I had inadvertently transferred my hosting duties to a student totally unaware of his new, exalted status.

Technological glitches aside, I've identified a number of other reasons that made distance learning less than gratifying for teacher and students alike:

1. Because of the differing time delays with students' internet connections, I found that I could no longer conduct any group recitations without the entire exercise turning into a clamorous cacophony. Instead, I had to settle for individuals reciting parts solo in succession, an inadequate substitute for the unifying feeling that collective speaking can engender.
2. Some students reported feeling more "on the spot" when participating in virtual discussions. Said one, "Pressing the unmute button was daunting. Unlike an in-person class, I couldn't just jump right into the conversation. Speaking over Zoom felt as though it required preparation for every thought I shared. All eyes on my face—which was suddenly blown up in 'speaker view'—was a situation much more nerve-racking than being in a regular class." The discomfort this student described was akin to watching television and feeling as if the television was watching back.
3. Another student pointed to other factors for the dampening effects of online learning on the free exchange of ideas. They remarked about their limited ability to communicate through facial expressions, verbal cues, and physical reactions. "I find my participation in class is often reliant on this type of responsive classroom space. . . (In our online class) the natural rapport was chopped up, and responding to others felt awkward."
4. "Zoom Fatigue" became an all-too-familiar condition, both for teacher and students. I found that I had to reduce the time of my classes, because of the exhaustion that participants felt. Gianpiero Petriglieri, a professor who specializes in studying this syndrome in the workplace, explains that during a video call, "People have to work harder to process non-verbal cues like facial expressions, the tone and pitch of the voice and body language; paying more attention to these consumes a lot of energy."¹ He adds that these feelings of exhaustion have been intensified by the conflating of what most of us take pains to maintain as separate dimensions of our lives: school/work, family, socializing with friends.

I realized that many of my hard-won strengths as a classroom teacher would be neutralized.

Imagine if you go to a bar, and in the same bar you talk with your professors, meet your parents or date someone. Isn't it weird? That's what we're doing now... We are confined in our own space, in the context of a very anxiety-provoking crisis, and our only space for interaction is a computer window.²

Needless to say, such confusing convergences in our lives can contribute added stress and fatigue.

5. A specific adjustment related to decreasing class time was that I had to abbreviate "presentation" segments of my classes. In a typical, in-person lesson, I could spend 15-20 minutes introducing new material without feeling as if students' attentions were wandering. However, in this on-screen format, I realized how quickly my student could either tune out or find their way to other distractions. While I can't be certain which diversions beguiled them, one of my students later confessed how easy it was to "multi-task," i.e., appearing to engage in the class while simultaneously watching

¹ Quoted in Manyu Jiang, "The Reason Zoom Calls Drain Your Energy," 4/22/20, [bbc.com](https://www.bbc.com)

² Ibid.

a dazzling TikTok dance routine or some graphic YouTube video of a feckless skateboarder smashing into a lamppost after unsuccessfully landing a glide down a handrail. Given the fragmented and digressive appeal of internet hyperlinks and endlessly entertaining social media sites, it's no wonder that students' attention spans are harder to hold in a humanities class that requires sustained focus, active listening, and nimble thinking.

There's another contributing factor that teachers using this online medium may need to acknowledge. One of my colleagues noted that for our entire lives, our brains have been trained to switch into a passive mode when viewing a screen. As brain specialist and neurosurgeon Adam Lipson contends, "There have been EEG studies that demonstrate that television watching converts the brain from beta wave activity to alpha waves, which are associated with a daydreaming state, and a reduced use of critical thinking skills."³ If a similar reaction occurs when entranced by any digital display, is it any surprise that students' eyes would glaze over after a few minutes of a teacher's online lecture?

Of course, some of the benefits that distance learning provides deserve mention. As one student said, "We were in the comfort of our own homes, somewhere I am able to very effectively get my work done. . . I was always well-rested, alert and prepared, having done my work in the relaxed environment of my home." Another student extolled the virtue of at-home learning by explaining that not having to commute to and from school or participate in extra-curricular activities, she had more time to complete lengthy reading assignments.

Clearly, comfort and convenience offer significant dividends to online learners. Of course, so does accessibility—assuming sufficient internet availability—in those cases where distance or travel constraints or a once-in-a-century pandemic makes in-person instruction challenging, if not impossible. When the alternatives dwindle to either distance learning or no formal learning at all, most concerned parents and diligent students would opt for online classes.

However, what if the choice comes down to either online education or some muted, diminished form of

in-school instruction? In a Herculean effort to reopen schools this fall, many administrators followed the guidelines established by health officials. They are severely reducing numbers of students in classrooms, implementing protocols for social distancing, and requiring faculty, students, and staff to wear masks. I have only begun to imagine what teaching such a class would be like. I have been longing for the buzz and hubbub of enthusiastic high school students interacting in a class again. I wonder, though, if those ubiquitous masks, almost entirely obscuring students' facial expressions and muffling some of their voices, would provide much of an improvement over their unmasked, two-dimensional likenesses viewed on a computer screen.

One final perspective about this topic needs some consideration. I have puzzled for many years over my ambivalence regarding too much dependence upon electronic devices for educational purposes. I considered it a major concession to the ascendancy of the electronic age when, a number of years ago, I decided to show in class several video versions of Shakespeare's "Get thee to a nunnery" scene, from *Hamlet*, Act III, so that students could experience for themselves different directorial interpretations.

However, I have been loath to supplement most of my classes with material culled from the internet. No doubt this feeling is a holdover from my pre-computer, teacher training days at Emerson College, in England. I have always felt that direct, in-person, teacher-to-students interaction creates by far the most immediate and effective situations for meaningful learning. Virtual media has always seemed to me an intrusive intervention, a lazy fallback option to grab the attention of a generation of young people addicted to screens.

That said, I long ago realized that the digital revolution has overrun our culture, and that it would be fruitless to join the holdout Luddites

wishing to transport us back to a simpler era. Indeed, in my personal life, I have become just as dependent as everyone else on the convenience of emailing and the entertainment value of Netflix. However, this major step into distance learning requires additional caution, especially considering Rudolf Steiner's repeated admonitions over a century ago that dark forces have been working since the advent of the Industrial Age to "mechanize" humanity. And while the technological

[Technology is] also a relentless force insinuating itself into our lives, blurring the lines between the virtual and the real, the trivial and the meaningful, and the counterfeit and the truly human.

3 Quoted in Stephanie Voza, "How Giving Up TV for a Month Changed My Brain and My Life," 6/06/16, fastcompany.com

advances of the past few decades now seem to offer us wondrous benefits, I am reminded of the fairy tale of "Rumpelstiltskin."

Like the miller's daughter, we are faced with a seemingly insurmountable task; hers was spinning straw into gold; ours is suffusing today's materialistic worldview with a spiritual perspective. In the daughter's case, three times the clever little man Rumpelstiltskin rescued her by offering to turn the straw into gold in return for her most treasured possessions: a necklace, a ring, and even her future first-born child. In our time, we have also been offered an endless "golden thread": the worldwide web that provides instantaneous global connectivity, boundless information, limitless diversions. However, as with the stickiest of webs, we have been ensnared by its enticements, without thinking about the price the future will exact. In the original Grimm tale, it is interesting that when the daughter-turned-queen resists giving up her first-born, offering instead all manner of riches to satisfy Rumpelstiltskin, he demurs, saying, "No, I would rather have a living creature than all the treasure in the world."⁴

I wonder if the current technological stranglehold on nearly every aspect of our lives will also demand a "living" sacrifice. Put another way: by eagerly and universally submitting to the allurements of digital devices, are we in danger of giving up some essential part of our humanity?

Thankfully, the fairy tale provides us with a possibly happy ending. Rumpelstiltskin gives the queen an out: ascertain his name, and she could keep her child. She needed a tireless and observant messenger to uncover the little man's identity. After the queen blurts out his name, Rumpelstiltskin throws the ultimate tantrum: "He stamped his right foot so deep into the earth that he sank down as far as his waist; then he seized his left foot with both hands in a rage, and tore himself right down the middle into two."⁵

The wisdom of fairy tales reassures us that as soon as we give the adversary a name, as soon as we pull the cloak of anonymity away, he loses his power. In our digital age, we need to awaken our powers of observation as well. We need to call the technology that has infiltrated all of our most human interactions—including education—what it is, not just what it purports to be. Call it a relative good perhaps, a comfort and convenience for many, a diversion for many more, but also a relentless

force insinuating itself into our lives, blurring the lines between the virtual and the real, the trivial and the meaningful, and the counterfeit and the truly human.

David Sloan taught at Green Meadow Waldorf School for 25 years before joining Maine Coast Waldorf School in 2006 as a founding high school teacher. He also helped to launch the Shining Mt. Waldorf High School in Boulder, Colorado. He is the author of *Stages of Imagination: Working Dramatically with Adolescents* and *Life Lessons: Reaching Teenagers through Literature*, as well as of a poetry collection entitled *The Irresistible In-Between*. David is a faculty member at the Center for Anthroposophy's high school teacher training summer program.

⁴ "The Fairy Tale of Rumpelstiltskin," translated by Joyce Crick, 10/13/09, theguardian.com

⁵ "The Fairy Tale of Rumpelstiltskin".

Those of us who teach in a Waldorf high school know well the archetypal questions and observations that resound from the text of Wolfram von Eschenbach's *Parzival*. Although in recent years I have dispensed with other "Ur" Main Lessons, such as *Faust*, instituting instead a seminar on 20th and 21st century female authors, I have deliberately chosen to keep the *Parzival* block in the 11th grade curriculum. From its strikingly modern and innovative themes of inclusion—for example, Parzival's brother, Feirefiz, born to an African mother, is essential to Parzival's success in finally re-discovering the Grail castle; the influence and agency of the book's female characters is incontrovertible—to the text's exploration of the young soul's journey through life, this 13th century work is an invaluable well-spring for the questions and insights that students experience when studying the text in its entirety. (I am impatient with watered-down presentations and approaches to this work and strongly recommend that high school teachers give their students the privilege of reading von Eschenbach's artful, stem-winding prose in its entirety.)

So how can one teach Parzival in a pandemic? How does such a significant moment in the 11th grade curriculum translate in the cyber world of remote learning? The New York City Rudolf Steiner School students and I had the following experiences this past April.

Continuity Was Key

The class "met" online, via Zoom, for 90 minutes every day throughout the four-week block. Prior to teaching the course, I toyed with the idea of meeting every other day as other colleagues were doing with younger grades. I decided against it: the impact of the text, I felt, would dissipate if we didn't deepen the discussions of the sixteen "books" that make up *Parzival* through conscious review and day to day elaboration.

Movement Was Essential

What worked was to begin with movement – sitting for a Zoom meeting for 90 minutes would have been debilitating. We spoke the morning verse, standing, and then our Upper School eurythmy teacher, Alexandra Spadea, began our day – working with Rudolf Steiner's indications for the planetary movements and their

corresponding colors and moods. Students stood behind their "desks" at home as we moved together to the gestures and sounds conveyed by Ms. Spadea:

Sun:	AU, white -	the complete human being
Venus:	A, green -	loving devotion
Mercury:	I (ee) yellow -	egotistical potential
Moon¹:	Ei (i) purple -	creative potential
Mars:	E (ay) red -	aggressive potential
Jupiter:	O, orange -	wisdom
Saturn:	U, blue -	"Tiefsinn," deep pondering, memory of times past

The views of planets and their influence are mentioned several times in the *Parzival* text. In later Zoom discussions, fruitful connections were made by the students between the gestures they were learning and the astrological import of these movements. As distant as we all were during our COVID spring, moving together to begin the Main Lesson united us.

Break-Out Rooms

Discussions of specific questions and themes in smaller groups proved invaluable to the success of the Main Lesson. The Zoom option of 'breakout rooms' gave students time to debate and educate one another on the topics set the day or week before. The ability to "visit" each one of these breakout rooms allowed me to answer questions as they arose and share further thoughts before moving on to the next group. I truly enjoyed the function that allows the host to end the breakout sessions at the same time for all. This proved so much more effective and efficient than the experience, surely familiar to other high school teachers, of having to run all over the school to gather back small discussion groups which had become so immersed in

1. Moon is a central place of balance – the only gesture that does not move. Imagine a lemniscate around the place where your wrists cross, and experience the relations of above and below at the crossing where your wrists meet.

their discussions that they “forgot” to return to the main classroom.

Timely and Immediate Response to Student Work

At the end of the week, students sent me cell phone pictures of their artwork and emailed their journal entries and essays on an almost daily basis. I could correct these on my computer and return them immediately for revision and final entry into the students’ Main Lesson journals. The rhythm of daily and weekly gathering and the immediate return of corrected work kept the momentum going, kept a check on who was not completing assignments, and most importantly, kept the intensity of the Main Lesson experience alive.

Individuation

With more time at home, it was important to encourage students to be creative and independent in their approach to the study of the text. They were asked to keep journals, into which artwork and personal essays were crafted every few days. Perhaps the isolation at home gave the students more time and space to think more deeply about the questions concerning individual freedom and destiny that the *Parzival* text brings so vividly to life. Clearly, students had more time throughout the day and week to do outstanding artwork as well as truly reflective writing in response to questions such as:

- A. What is the Grail and what does it mean as a symbol, both in *Parzival* and in our lives today? Parzival is described as a “Brave man slowly wise.” How does a person find the Grail? What qualities are needed—for Parzival and for any individual—to find it?
- B. Who are the main female characters in *Parzival*? What roles do they play in the book? How do they both visibly and invisibly move the plot?
- C. Describe the role of polarities or opposites in *Parzival*—black and white, joy and sorrow, love and hatred, alertness and dreaminess, physical love and spiritual love, innocence and experience, etc.

Here are some examples of work, in word and image, from student journals:

Student Journal Entry 5

The sorceress, Cundrie, who reveals Parzival’s disgrace in front of Arthur’s court, can be seen as representing an alter ego, or shadow side of Parzival’s persona. Do you have a “shadow side?”

I have never been a patient person. Even from a young age, if something wasn’t coming easily to me, a mild tantrum was about to ensue. My parents always tell me that I was an easy and docile child, but the smallest things could frustrate me. My first enemy was learning how to put on my socks. After my mother would calmly explain that there was no “left” sock and “right” sock like the shoes that I was already fairly adept at putting on myself, I expected to be able to just pull them on my feet and be done with it. Sadly, this was not the case, as half of the time I would put them on upside down so that the heel was bulging on the top of my foot. This would make me suspicious, thinking that maybe my mother was wrong; I would switch the socks from one foot to the other. Of course, the socks would be upside down again, causing me to rip the socks off my feet and throw them across the room.

Although I eventually did figure out how to put socks on correctly, I had quite a few other learning curves that caused me great frustration. I was the very last child in my grade to learn to read, and after hours of programs and games and exercises I would ball up my fists and swear that I would never be able to do it. Similar to my sock dilemma, however, I overcame my aversion eventually and became an avid and passionate reader a few years later.

I have developed more patience with myself at this point in my life, and have even developed a perseverance for accomplishing things, once I put my mind to it. I have found a way to harness my impatience with myself as a power source which feeds my determination. Out of stubbornness (that is also a definite shadow side of mine), I refuse to allow my frustration to get the better of me. I try to recognize my impatience as an expectation that I have for myself, and it acts as a driver to push me towards my goals.

Julia Byrne, Class of ’21

Student Journal Entry 6

Love and its many manifestations is a dominant theme in Parzival. What are your thoughts on Love?

Love is the bond between two beings. It is often a sense of safety that one feels in the presence of another. Love does not have to be mutual; in fact, some people find it easier to love someone who does not love them back, someone who does not reciprocate their feelings.

Not all love is romantic. Two close friends may have love for each other that is created by their reliance on one another. But when one person loves another, and it is not mutual, it can hurt. In Gawain's case, the love that he feels for Orgeluse is initially only based on her outstanding beauty. His attraction to her is amplified when she teases him and denies him. This is because of Gawain's curiosity and pride. Gawain is not used to being rejected by

women, which is why Orgeluse stands out to him. The evolution of their relationship is one of my favorite parts of Parzival. It is revealed that Orgeluse used to have a husband whom she loved dearly, but he was killed. This is the reason she pushes Gawain away and tests him so severely. This fact reveals that there is always more to someone than meets the eye. And only when, Gawain learned to feel someone else's pain could he truly love in a truly selfless way. Love is about feeling: if you cannot feel someone else's emotions you can never understand them. And if you cannot learn to have patience for someone else's love, then you will wait for it forever. When you truly love someone and feel like you are completely bound to them, it will feel like you are on fire.

James Hixenbaugh, Class of '21



Illustration by Leah New, Class of '21

Final Thoughts

Remote learning cannot take the place of what Waldorf education prizes so highly – the spontaneity and inspiration inherent in a live, classroom setting. Waldorf teachers know that there is an invisible but palpable spiritual substance built up through the person to person engagement of human beings: nothing can substitute for the community experience that teachers work so hard to achieve in the “trenches” of the daily classroom. Ongoing study, meditation, and collaborative research allow Waldorf teachers to strive to be ever flexible and creative. Still, through the challenging and exhausting work of our COVID spring, I found that the remote learning platforms that I learned to use for teaching high school literature classes could be shaped and directed to achieve a semblance of the participation and immediacy that make teaching a course like *Parzival* such a rich gift for students and teacher alike.

Carol Bärtges’ roots run deep in the Manhattan schist of the Rudolf Steiner School: She is a graduate, as are her two children, Max and Sarah, and has been teaching English and Drama at the high school for four decades. Her long association with the school includes serving as a class teacher, Chair of the College, and Chair of the Upper School. For ten years, Carol was a member of the AWSNA Leadership Council as the representative for the Mid-Atlantic region, and her deep interest in mentoring and faculty development continues in her work with the Faculty Development Committee of her school. She holds undergraduate and graduate degrees in English and Comparative Literature.



Lucia Villanueva, Class of '21



Teaching in a High School Adaptations, Effects, and Opportunities

Stephen Keith Sagarin

“I miss you guys. I miss everyone so much!” These are the words of an adolescent, an only child, in tears at the end of one of our regular Zoom classes, in a home full of fear and friction. This student lives with a single parent who survived cancer and a debilitating cancer treatment, and who is at a higher risk of death should COVID-19 find its way into their home. As it is for all of us, this family’s routines are disrupted, and they have unfamiliar practices and habits to learn, ones that just might mean the difference between life and death, at a time when expert advice seems to change week by week. Is it ethical to ask this student to have to fully focus on school work?

Adaptations

1. We wrestled with questions like the one above and with many others. What schedule would we use? How much work would we or could we assign? What kind of work? How much flexibility should we or could we have? We adapted and readapted. We left our school building on Friday, March 13, 2020, and we began to teach remotely in all academic courses on Monday, March 16.
2. Many of us already had Google Classrooms established. We beefed these up with links and videos and established new Google Classrooms for courses that had not previously had them.
3. Many of us recorded short video or audio introductions to topics in history and literature, in lieu of longer, in-person lectures, and then we focused our Zoom classes on discussion.
4. We quickly made all courses other than seminar (“morning lesson”) optional. Some families, for instance, had a single, slow internet connection for several children and two parents who were trying from home to keep their businesses alive.
5. We postponed Organic Chemistry to the fall, and substituted an Introduction to Psychology course. Studying psychology during a time of psychological stress, anxiety, and depression made sense, and lab work just wasn’t possible.
6. We graded all courses pass/fail by default, giving grades only to students who requested them.
7. We moved, in general, from daily assignments to weekly projects.
8. We took Spring Break early in order to regroup. No one was going anywhere anyway.
9. After Spring Break, we added remote art courses, weekly projects based on materials students already had in their homes. The most popular of these was participation in a Getty Art Museum Quarantine Challenge, in which participants used materials found in their own homes to recreate tableaux that reproduced a work from the Getty collection. Art teachers met with students remotely to discuss their projects, and students submitted photographs of their work online.
10. After Spring Break, we added a Morning Meeting by Zoom each day. Students, parents, and teachers joined a Zoom conference to hear a poem and to recite the morning verse. Students and teachers volunteered to read poems that they loved or that they found meaningful. We collected these poems into a booklet that was sent to each family at the end of the school year.
11. As the spring moved forward, we cancelled a week-long hike, a surveying course, an astronomy course, overseas travel, chorus, physical education, spring sports, the spring play. Probably other things that I’m forgetting. All of a sudden, none of these activities was allowed, lawful, or prudent. Because of these cancellations, we ended the school year a week early—why prolong hours in front of a screen when the weather is great and the academic credits are accounted for?
12. We held our year-end assembly by Zoom. Five candles burned on one laptop screen—one for each class in the school, and one for the school itself. Each member of our core faculty spoke movingly to one class or another, after which we extinguished that class’s candle, signaling the promotion of its students to the next grade. We did not, though, extinguish the school candle. We recorded the assembly and made it available for grandparents and other friends and family members to see. While we kept the recorded assembly private through a

- secured link to the site, it has been viewed almost 500 times in a community of 50 students. Strange to say, it is now the assembly with the largest audience in the history of our school.
13. We also moved online our annual “Everything I Ever Needed to Know I Learned at Berkshire Waldorf High School” year-in-review quiz show. For this quiz, teachers wrote questions, for which they also provided answers, while another teacher entered these into software that kept score in real time as students, grouped in four teams, followed the quiz on laptops and answered the questions via a cell phone app. Team names? The cardinal virtues: Fortitude, Patience, Justice, and Temperance.
14. We made a ten-minute video slideshow honoring our graduates, obtaining childhood photos and using school photos from their years together. Two students provided original songs for the soundtrack. The seniors and their parents—and

some teachers—were moved to tears, not, this time, because of loneliness and sadness.

15. We delayed graduation for almost two months in order to hold it in person, outdoors, distanced, in masks. Totally worth it.

Effects

All of these adaptations were necessitated by the vast, strange cloud of the COVID-19 pandemic. In addition to the obvious sadness, loneliness, and isolation, here’s what we noticed:

1. **Cognition**
We are beings who engage with our world through thinking, through feeling, and through will—or, as developmental psychologist Howard Gruber puts it: we use evolving subsystems of knowledge, purpose, and affect.¹ Alternatively, we can use the terms of developmental psychologist Simon Baron-Cohen (brother of the famous comedian Sasha Baron-Cohen): we switch between



Madonna and Child in a Window
Martin Schongauer; c. 1485–1490; Oil on panel



High School Junior and Teddy Bear in a Window
Linda Ripley, Class of 2021; April 2020; Staged photograph

Remote art project. Entry in Getty Museum’s “Quarantine Challenge,” featured on the Getty Museum Instagram account.

1 Gruber, H., and Bodeker, K., eds. (2005). Creativity, Psychology, and the History of Science. Dordrecht, The Netherlands: Springer.

epistemic, perceptual, and volitional mental states.² Regardless, our tripartite engagement with the world is clear.

But only one mode—call it thinking, cognition, knowledge-based, or epistemic—is privileged by a computer attached to a screen. To put it bluntly: remotely teaching in purely cognitive fields, like math or computer programming, is relatively easier than remotely teaching in fields that are multi-dimensional. I taught a precalculus class last spring and, with the assistance of a small whiteboard that I held up to my laptop camera, my class and I could make progress just about as swiftly as we could in person. It was less fun, with fewer digressions and explorations, fewer puns and jokes, less human contact, but it was effective.

2. Affect

Emotions, on the other hand, are flattened and attenuated through a screen or a phone. We can't shake hands or hug; tone of voice and facial expressions are compressed, sampled, mis-timed. The distractions of our off-screen surroundings and the fact that we don't share these make an emotional connection harder to establish and to maintain. It is possible to maintain already-established relationships remotely, at least for a while, but it is significantly harder to establish healthy, trusting student-teacher relationships when teaching remotely. Teaching, expressing love, developing an aesthetic sensibility or a comfortable or safe "space" are all much harder via videoconference.

3. Behavior or Will

If affect and aesthetic sensibility are harder to maintain over electronic media, teaching the violin or ceramics or blacksmithing or soldering a robot are virtually impossible. Behavior or will may be remotely affected only indirectly. I can move or demonstrate on my end; you can copy or try on yours. I can send directions; you can follow them. Or not. I can watch you move or draw and try to assist or correct with words or a demonstration. I can sing; you can sing back (singing at the same time just doesn't work with the echoes, jitters, and time delays). The will is almost beyond reach through a remote audio-video connection. It can be employed only with significant effort to cognize first and act second.

4. Social-Emotional Health: Anxiety, Depression, Attention

A growing number of studies suggest that "screen time" increases the risk of or contributes to developing ADHD, anxiety, depression, loss of attention span, weakened memory, and sleep pattern disruption.³ And that's a partial list. For instance:

Early data from a landmark National Institutes of Health (NIH) study that began in 2018 indicates that children who spent more than two hours a day on screen-time activities scored lower on language and thinking tests, and some children with more than seven hours a day of screen time experienced thinning of the brain's cortex, the area of the brain related to critical thinking and reasoning.⁴

It's hard to generalize, but these effects are generally stronger in young children, persist through adolescence, and affect even mature adults. So the unprecedented leap from classroom teaching and learning to remote, often on-line, screen-based teaching and learning in spring 2020 is not without consequences, even if the immediate consequences are not clear. Certainly, our students expressed and demonstrated their ongoing challenges with anxiety, depression, and maintaining attention.

5. Inefficiency

Students generally learn more slowly or master less content in the same time when their education is conducted remotely; fatigue and inefficiency are real. For instance:

Jessica Heppen and colleagues at the American Institutes for Research and the University

³ Here's just a small sample of relevant studies and reports:

"Screen-time is associated with inattention problems in preschoolers: Results from the CHILDBirth cohort study" – <https://journals.plos.org/plosone/article/comments?id=10.1371/journal.pone.0213995>

"Association of screen time with self-perceived attention problems and hyperactivity levels in French students: a cross-sectional study" – <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4769424/>

"Television and Video Game Exposure and the Development of Attention Problems" – <https://pediatrics.aappublications.org/content/126/2/214>

"Impact of Singular Excessive Computer Game and Television Exposure on Sleep Patterns and Memory Performance of School-aged Children" – <https://pediatrics.aappublications.org/content/120/5/978>

"How the Internet may be changing the brain" – <https://www.sciencedaily.com/releases/2019/06/190605100345.htm>

⁴ "What Does Too Much Screen Time Do to Children's Brains?" – <https://healthmatters.nyp.org/what-does-too-much-screen-time-do-to-childrens-brains/>

² Baron-Cohen, S. (1995). *Mindblindness: An essay on autism and theory of mind*. Cambridge, Mass: The MIT Press.

of Chicago Consortium on School Research randomly assigned students who had failed second semester Algebra I to either face-to-face or online credit recovery courses over the summer. Students' credit-recovery success rates and algebra test scores were lower in the online setting.⁵

Opportunities

In this vast, strange cloud, there were also silver linings.

1. The scenario with which I began the article is real. The anchors of cognitive engagement, of the struggle to maintain relationships with teachers and peers even through a phone and a screen, and of having a schedule and a structure and something to do, meant a lot to this student, who would have had an even harder time without them. Something is often better than nothing. A mediated, attenuated experience is better than total isolation.
2. A few students thrived on greater isolation and more project-based learning. Those few who multitask easily, who are less distracted or distractible in their own bedrooms than in a classroom, who seem less interested or who are stressed by adolescent social interactions, saw their work improve. I would say this improvement applies to about two of our roughly fifty students. More students, to be clear, did not improve, and virtually disappeared—missing or avoiding Zoom calls, claiming—who knows what's true?—that their video was broken, that their connection failed, or that their internet was down.
3. Our school is in a rural part of Massachusetts, so most students can easily spend time outdoors. Cows still need to be milked, horses groomed and exercised, gardens tended, birds watched, trails hiked, rivers rafted, and roads ridden. A gift of fewer, shorter classes, albeit remote, and no commuting time, was the possibility of time outdoors. Students also just had more time: time with their families, time for reflection. They could help cook and clean and care for younger siblings. They could read. More than one student got a job or apprenticeship for the spring in carpentry or auto mechanics. (Students could also abuse unstructured screen time and video games, of course.)

4. Further, students could suffer boredom and have to develop a kind of inner strength to overcome it. Regardless, they had an opportunity to become inwardly more self-reliant at an earlier age because of their isolation. That seems a small reward, but, possibly, it will pay off well for them in the unknown futures that they will face.

5. Finally, in a world that often argues for the slick, sleek values of remote interaction, let's hope these students carry with them a memory of what that isolation has really been like. Let's hope they have learned first-hand, and consciously, the value of human relationships.

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5 Susanna Loeb, "Students who struggle will likely struggle more online" <https://www.edweek.org/ew/articles/2020/03/23/how-effective-is-online-learning-what-the.html>. See also "The Struggle to Pass Algebra: Online vs. Face-to-Face Credit Recovery for At-Risk Urban Students," in the *Journal for Research on Educational Effectiveness* (volume 10, issue 27, 2017); <https://www.tandfonline.com/doi/abs/10.1080/19345747.2016.1168500>



Grades and External Motivation in Waldorf High Schools

Examining the Assumptions and Imagining Alternatives

Alison Davis

I took one of the Main Lesson books off the stack in front of me and started flipping through. The eighth-grade class teacher was kind enough to pass along the students' work so I could start to form a better picture of the developmental journey of all our students, not just the ones I teach. So much of what they produced was breathtaking. I saw intricate drawings, elaborate calligraphy, shading and border techniques, and a growing capacity to explain their experiences of the world with clarity. Of course, not every Main Lesson book would be destined for display at an open house or Holiday Faire curriculum table, but every child turned one in. Every child showed evidence of their growth through the way they worked with the material. Every child made progress.

On a Saturday afternoon, I was sorting through the mail, ready to toss everything in one indiscriminate heap in the recycling bin, when I eyed an unexpected hand-addressed letter. I instantly recognized the belabored scrawl of one of my students, a senior. He had apparently decided that he hasn't dedicated enough time to improving his creative writing skills and wanted my input on a short story he had written. He enclosed the story and a wealth of warm wishes for my forays into the life of his imagination.

A student's mother smoothed the tablecloth that covered the desks that I had pushed together for parent-teacher conferences. It was our first conversation together, though I had already had a few brief interactions with her husband. We fawned a bit over her ebullient daughter and then moved on to her son. She opened by informing me that he was a genius, even though at school it's hard to tell because his grades are so poor. He's learning all the time, she told me; he just doesn't care what letter gets attached to his learning, and he doesn't want to play the game the teachers are asking him to play. We, the teachers, had accepted the forgone conclusion that his low output reflected some kind of cognitive or processing impairment, but recent educational testing has shown that not to be the case.

One morning in the early weeks of the COVID quarantine, I drove over to a student's house and fashioned the words "Happy Birthday" out of quartz landscaping rocks, because turning 18 all alone in an empty house

is not fun. For many days, the student hadn't really participated in Zoom classes, beyond turning on his video for attendance. I was hoping the gesture would shift something for him. While he saw me just as I was leaving, came outside with tears in his eyes and said "You didn't have to do this," still, his level of engagement in the class did not change. Three weeks into a Main Lesson named "The Art of Living," which I specifically designed for distance learning, he took a picture of those landscaping rocks, rearranged into the word "change," and submitted it for a gratitude photography assignment. After that, he started opening up about how hard the pandemic was on him. And after that, he started creatively participating in class. I assured him it was not too late.

These vignettes are meant to invite us to confront, in living pictures, either for the first time or once again, one of the age-old assumptions about giving grades to high school students. Most of us have either implicitly or explicitly accepted the idea that grades are necessary to motivate students to do work. In a similar vein, we seem to have subscribed to the idea that without grades, students would slack off, become complacent, or not live up to their potential (as determined by the limited perspective of the teacher, of course, but I will leave this issue to be discussed on a different occasion). While it is true that grades appear effective in providing an external motivation for some students, there is a growing body of research in contemporary education studies, directly refuting the necessity of grades for learning and growth. Most notably, *Challenge Success*, a research organization under the auspices of the Stanford Graduate School of Education, provides thorough evidence that the promise of mastery and self-improvement is enough to motivate students to take up meaningful work.¹ One of the shorthand terms for this phenomenon is 'intrinsic motivation.' While you may have heard students or parents express opinions to the contrary, stating that aiming for the A keeps them on top of their work, I invite you to imagine that this is simply because they don't know (how to imagine) that another way is possible. In doing so, I hope we can use

1. Challenge Success even goes so far as to say that students should not be graded during distance learning. They advocate for credit/incomplete in all student assessments. See: <https://www.challengesuccess.org/blog/guidance-on-grading-crediting-policies-during-COVID-19/>

that imagination to inspire an alternative to using letter grades in assessing high school students.

Examining the Assumptions

First, let us examine the premise that is illustrated by the first vignette above. We could ask the question in a very simple and direct way: Is a student at the end of eighth grade and a student at the beginning of ninth grade in significantly different phases of their development? If the answer is yes, then it may be possible to state that while grades weren't necessary to motivate an eighth-grader to learn or do school work, they have somehow become necessary by the beginning of ninth grade. Taken from this angle, however, the assertion starts to sound a bit absurd. It is more likely that whatever motivated students in middle school, for better or for worse, is still what drives them once they begin high school. It could be a desire to please the teacher, to excel, to express oneself, to experience growth, to produce something beautiful, to conform to an idea of intelligence, or any number of other things. It seems unlikely that receiving a grade, in and of itself, would be the determining factor.

From an anthroposophical perspective, it is true that the skills and capacities of the twelfth-grader are different from those in grade nine, and we do indeed need to consider the arc of the whole high school. For example, a ninth-grader is much more likely to respond to the authority of the teacher and perform a given task just because she or he is asked to do so. The reflex of questioning has not fully set in. But after the shift around the age of fifteen, when the authority of the external world starts to hold less influence, perhaps it would seem logical to then employ grades to motivate students to do work that they might otherwise question. In that sense, I can imagine that grades appear tempting to a teacher of tenth, eleventh, and twelfth grade students, as a means to keep students on the track that the teacher has laid out for them. However, I propose that because grades belong very clearly to the world of external authority, they work against the developmental changes happening in students and are therefore not as effective as one might think. In fact, they likely impede the inner growth and conviction, which mainstream research terms intrinsic motivation, that is beginning to develop in the upper grades.

In the second vignette, the student's quest for feedback on a non-required, non-graded assignment starts to

shake up the assumption that grades are the primary tool for motivating students to do their best or highest quality work. Without them, students may complete the tasks that are assigned, but they may not fully invest themselves in them or develop themselves to the same degree. That is certainly true in some cases, but in others, as in the vignette described above, it is not. One of the questions that arises as a result is: Must we use an external motivator to try and strong-hand students into performing (in distinction to learning) at the highest possible caliber for every assignment? As a corollary, must we ignore all the students who do their best work *outside* of the system of grades, taking few or no cues from their pursuits, their growth, their learning?

If you are tempted to believe that a student mailing a short story for feedback is an outlier, you would be correct only at the letter of the phenomenon, not in the spirit of it. At many schools, senior capstone projects are an ongoing example of students investing significant effort and energy in meaningful projects, even when there is no grade attached to it to motivate them to do so. Observe any student practicing a team sport or engaged in a hobby, even a very demanding one, for further evidence that the promise of improvement and mastery is enough of a motivation to undertake rigorous pursuits. I contend that grades are simply not necessary in the way we have typically thought.

While the first two vignettes presented above offer examples of students thriving without grades, the third one exposes a less rosy picture. The very thing that we

are tempted to think grades do, which is to motivate students to do work, is by no means a failsafe. Teachers know this, of course, but are not generally given the time or space to really explore it. What students with failing grades expose is that motiva-

tion is much more complicated and individual than the uniformity or rigidity that quantified grades represent.

As I reflect on the students who have been given poor grades over the years, I see two primary patterns emerging. First, some are far more interested in growth and learning than in performing in the rather limited ways that they are instructed to perform; the reasons for that are all over the map. For example, one student recently explained to me that she was finding a lot of meaning and a sense of fulfillment in her after-school job and was becoming less interested in "jumping through hoops" at school. A student-athlete who competed at the national level said very clearly that he would rather

There is a growing body of research in contemporary education studies directly refuting the necessity of grades for learning and growth.

put in another hour on the field than spend it on the artistic embellishments that impress teachers. There are likely more students who share these attitudes than we realize, but our school culture does not necessarily solicit such reactions or allow them to surface. The student portrayed in the third vignette falls into this category. He tends to do the minimum amount required for many classes, or to sporadically invest himself in school activities, according to his own interest. In fact, I learned that he taught himself to build guitars in his garage and to play new instruments; he chose these activities over doing his homework, thereby negatively impacting his grade, which was constructed according to a traditional model. He didn't care. He cared about creating things and music. To be clear, I am not saying that it is of no consequence that this student was routinely late to class or completed only small portions of his work. What I am saying is that if we want to find sources of motivation, we should take more cues from this student's success rather than his failures. I am confident that we can broaden his interests and encourage more consistent engagement through human connection and meaningful tasks; we most definitely will not achieve this through dangling grades in front of him as rewards for external achievements. Unfortunately, the discourse about grades tends to end up dominating the conversation.

In the case of the final vignette, for this withdrawn student, finding motivation was at the heart of his issue with schoolwork. Tackling the challenge from the perspective of a potential failing grade would have been completely counterproductive. At the root of the issue was the fact that he perceived school to be a waste of time while people were dying of COVID-19, when neighbors were losing their jobs and their security, and when he felt utterly helpless to do anything of value in the moment. Imagine meeting such a monumental soul-dilemma with, "Well, I'm sorry, but you still have to do everything I say if you want to get a good grade." And, unfortunately, it's much more common than teachers might think for students to hear, "You still have to do everything I say in order to be a good person." This student saw right through these façades. Instead of meeting a student like this with an "objective" conversation about the impact his behavior has on his grades, communicating on a human level, heart-to-heart, is a much more beneficial route. Emphasizing the safety of the relationship, rather than setting up some external yardstick of "good enough," creates a space from which intrinsic motivation can be discovered. This approach is

Each student deserves an assessment method that actually promotes internal motivation, rather than demands it from the outside.

especially needed in a distance learning situation, when the things that formerly felt important may no longer hold as much sway. In fact, they may have lost their appeal altogether. While many teachers are willing to acknowledge the unprecedented circumstances of the pandemic and of distance learning, are just as many willing to allow these circumstances to surface and be expressed in ways that they do not seek to control?

Grappling with control in a real way is vital to discussions of student motivation and assessment, and it is more important than ever in the context of distance learning. It's easy to fall prey to the illusion of control when we are in the classroom

because we can craft and curate experiences in very specific ways. We can make seating charts, aim to reduce distractions, provide immediate tactile support, arrange time and space just so. But this is not the case for remote teaching. The factors that motivate students in the classroom—like dynamic group energy, like getting a hug or a high five, or hearing piano music drift in from the other across the hall—are currently not present. This doesn't mean that many students can't still do well or even thrive in their home environments; it simply means that we shouldn't punish students for what has been taken away from them. I see the refusal to punish the student in the fourth vignette above as the reason why he did end up recovering his own motivation. He found a reason to engage in the classwork – not out of fear of failing, but because he had time to process the obstacles of the pandemic and of distance learning, only after which he could find a way to make his work meaningful. And what if he hadn't? Should he have been punished for that with an F grade because he was forced into a distance learning setting that didn't meet his needs or optimize his learning in the way that an in-person experience does? By now, it is probably clear what my own answer would be.

In parallel to this final vignette, many students are just not yet able to do what is being required of them, for whatever reason, and I do want to emphasize the word *yet*. They are at a different place than the "ideal student" in their learning process. The assumption that we can motivate students with grades to somehow be at a different place in their development, in their neurocircuitry, in their soul life, is dubious at best and unethical at worst. In other words, external motivation is simply not a factor in their process in the direct way—i.e. students want to earn the reward of a good grade and avoid the punishment of a bad grade—that we assume it to be. Learning differences, psychological states,

family stressors, the challenges of distance learning, and myriad other factors influence what a student is able to do at any given moment (I will explore these issues in another essay). For now, it seems difficult to imagine a teacher who hasn't already experienced the limitations of using grades as a motivator; the question then is whether teachers can find the courage to examine such experiences and act on them.

For students who receive failing grades but seem not so bothered by that fact or are unable to respond in the way the teacher expects them to (that is, by improving their grades), educators must seek new avenues of connection. Each student deserves an assessment method that actually promotes *internal* motivation, rather than demands it from the outside.

Action-Based Research

Under my direction, the humanities department at my school began last February undertaking its own action-based research on the subject of grades and external motivation. To get things moving, and following the inspirations of work conducted at a conference with the Center for Contextual Studies, I decided to opt out of the traditional grading scale in both the Main Lesson and the track class I was teaching at the time. Instead, I informed the students that their default grade in my classes was an A. There was a lot of looking around the room to see if I was serious or not (I am known to fabricate some rules to expose ways of thinking and solicit reactions), but there was nothing behind the curtain this time. I was taking a risk.

If the tales about needing grades to motivate students were true, then I should have expected almost immediate changes in several aspects of student engagement. Most notably, I would have seen drop-offs in engagement, participation, and quantity and quality of work. However, this was not at all the case. In the Poetics Main Lesson that I was teaching, I actually saw sustained evidence to the contrary, and it started right away.

As most teachers can attest, the tenth grade can be a tumultuous year, rife with clashes with authority, a loss of belief in external structures, and a rejection of the perceived and real imperfections of the world. In response to my new non-grade policy, I discovered that instead of taking full liberty to rebel against school with the safeguard of not being punished with a bad

grade, every single student leaned in more deeply. The students exhibited noticeable relief from what was perceived not as an external *motivation* but as an external *pressure*. And when the energy usually given over to worrying about grades was freed up, new things became possible. I didn't have a single disciplinary issue (although chronic tardiness persisted with a few students); not once did I have to fight to get the students' attention, and I did not experience a single clash of will. The type of motivation that was allowed to come to the forefront was the desire to say something meaningful. Nothing else was needed to sustain the students' engagement. Furthermore, the primary reason any other external measure would be needed would be due to the absence of the desire to say (produce, build, invent, etc.) something meaningful. As educators, we would do better to invest our time in designing meaningful experiences, encounters, and opportunities, rather than elaborate grading systems and policies.

In fact, for two weeks, every single student did every single activity and assignment. This included the work during Main Lesson, such as completing dictations, discussing poems, writing original poems using various techniques, participating in workshops, and finishing or typing up their original poems for homework that night. This has never been the case in any of my previous classes (including in classes I had taught at top-

tier universities) that every single student completed every single assignment for even two consecutive days. Furthermore, the quality of the work that the students produced, the depth and texture and creativity of their use of language, far surpassed what I have witnessed in years past.

There were perhaps some other factors that played into this, but none quite so salient as the removal of grades from the learning equation, so that the experience of meaning-making could be at the center.

It is true that there was a slight drop off, in the last week of the Main Lesson, in the immediate turnaround time for the students' original compositions. However, instead of just dropping assignments, the four students who didn't meet the initial deadline went back and completed all of the work by the following day. It's not that they had lost motivation; it's just that they needed more time to fully come into what they had to say. One of these students made it a point to say that had he been graded for the assignment, he would have turned

Overall student engagement has continued, even over Zoom and even for seniors, whom we normally peg as “checked out” by the end of the school year.

in what he felt was “a load of crap,” just to be done and get the points, instead of taking the time to be more deliberate in his work. In this sense, not being held to the traditional grading scale actually improved the quality of the work of five students in the class.

On the penultimate day of the block, the students all showed up to perform their original poems at a Poetry Night. I never told the students that this performance was required or that they had to do it to pass the class.

I never said I was evaluating them on their diction or expressiveness or any other performative aspect of their poems. And still, they all showed up and showed up strong. Two of them broke down into tears while reading their work, and there were many teachers and parents in the audience who were shedding tears as well.

Several parents stayed afterwards to tell me that they didn’t know teenagers could write like that. A colleague mentioned that even the adults in her MFA program would be hard-pressed to write as well as some of the students. One parent asked me how it is possible to get a room full of guarded, self-conscious teens to be so vulnerable. Because I have taught very similar classes in the past with the same kind of enthusiasm and investment in individual students, yet with different results than the ones described above, I am inclined to believe that the power of our experience of going grade-free had a lot to do with it.

Overall student engagement has continued, even over Zoom and even for seniors, whom we normally peg as “checked out” by the end of the school year. Giving my twelfth-grader distant learners a default A was definitely the biggest risk in terms of motivation. They already had their college acceptances, their scholarships, and their post-graduation paths. They also had disappointment and disillusionment with everything they seemed to be losing: prom, class trip, graduation ceremony, and all the rest. In other words, if there were to be one group of students who would be poised to take advantage of my grading policy, it would be the seniors. However, this was not at all the case. Instead of trying to translate the classroom to the computer, I asked them to stay curious, stay connected, and keep striving. I designed a new Main Lesson specifically for online learning, naming it “The Art of Living,” and I also co-taught a drama elective with one of the seniors, in which half the class enrolled. Instead of investing my energy into devising

elaborate schemas for collecting work, grading it, and returning it, and holding it up against an external standard (that I would have had to invent in isolation), all of which would have further tethered students to and made them depend on electronic devices, I opened up space for students to find and exercise their will. In their humanities classes, students had a chance to find their own motivation, to connect with a truer, deeper reason for doing things. It’s true that some opted out here and there, but these were the same students who

were already inconsistent within the system of grades, like the one described in the third vignette, so there was nothing lost as a result of this change. All of these data points once again expose their limited efficacy as motivators; instead, what becomes highlighted here is

the promise of a meaningful, self-directed experience as sufficient for most students to stay invested.

In the months since piloting this initiative, two other teachers in the humanities department have adopted the same policy; each student’s default grade is an A, and if there is really a need to deviate from that to reflect a complete shirking of expectations or total lack of engagement, we have left in place the possibility of assigning a failing grade or of not giving credit for a course. So far, only one student did not earn credit for a class. There was one other student, who would have likely failed with the kind of scholarly performance displayed had it been in an in-school setting, but the department decided to not penalize for needing the physical school environment, the direct contact with peers and teachers, in order to succeed. This solution is temporary until the school is ready to move away from grades all together and adopt an alternate transcript, like the one used at the Rudolf Steiner School of Ann Arbor. The courses that have been impacted by this change are: Digital Literacy (12 Grade), History through Music (11 Grade), History of Consciousness (12 Grade), The Odyssey (10 Grade), Transcendentalism (12 Grade), The Art of Living (12 Grade), Native American History (9 Grade), Rhetoric (10 Grade), and The Novel (9 Grade). The first three of these classes began before the COVID-19 shutdown but finished in distance learning. None of us has had any new concerns about student motivation, engagement, participation, or quality of work. On the contrary, we can all provide evidence of growth and progress that we could not have anticipated.

When that relationship between students and their own creation, or lack thereof, is finally and ultimately mediated by a grade, it is very easy to lose sight of the purpose of the work itself.

Closing Considerations

In addition to all of the considerations above, as a Waldorf school, we must also take into account the soul impact of using a reward/punishment system to maintain what are often unexamined standards of poor, passing, excelling, etc. at any given moment. When we begin observing students at a deeper level, developing our imagination, inspiration, and intuition, it actually seems likely that using grades as a motivator actually detracts from the inner agency of the child. From an anthroposophical point of view, this interferes with the growth and development of the child in a harmful way. If we take seriously one of the central ideals of our movement, that Waldorf education is a healing one and that healing is experienced first and foremost through agency, we will have to conclude that using grades as a motivator actively works against our core mission and values because it detracts from agency.

High school students in particular are very aware of the fact that on the one hand, our Waldorf schools promote agency and freedom, but on the other hand, they still tend to engage in reductive practices that limit student's ability to discover in themselves how to relate to their work, or even what their individual work (usually called *a path*) might be. When that relationship between students and their own creation, or lack thereof, is finally and ultimately mediated by a grade, it is very easy to lose sight of the purpose of the work itself. As Waldorf educators, we continue to emphasize process, but outcome still gets the final word in the form of a grade. With the advent of distance learning, we see far less of the process than ever before, and therefore are not able to guide and support it in the ways to which we are accustomed. Yet we are still attaching ourselves to grading outcomes. This does a disservice to the students' growth, and we owe it to them to examine the reasons why we continue to cling to grades with such fervor. Becoming aware of the discrepancy between the processes we observe via distance learning and the outcomes we evaluate can serve as an open invitation to question that relationship in the classroom as well. Indeed, in examining grades and motivation, there are so many entry points into larger questions around student assessment.

Finally, I have not been able to find a single reference to grades in any of Steiner's lectures on education or adolescence. On the contrary, grades seem to be something that are more suited to serve the needs of institutions rather than the needs of individual children; of that, Steiner makes broad and sweeping condemnations, most directly in *Education as a Force for Social Change*, but in many other places, as well.

To be clear, what is being proposed here is not an elimination of expectations or of rules that ensure a safe and supportive environment; nor is there any intention to do away with feedback on engagement, participation, and quality of work. The issue at hand is only the use of letter grades as a means of motivation. There are many other reasons to let ourselves outgrow the use of grades, including misgivings about fairness, issues of college readiness, and the need to measure learning, all of which I will be addressing elsewhere. If there were ever a time to shed an old practice and try something new, it is now, when so much is up in the air and primed for new imaginations. We have been gifted an opportunity during this pandemic and suspension of our normal practices to keep what best serves learning and the growth and development of human consciousness; creating more meaningful experiences of intrinsic motivation and agency must be a part of the fulfillment of this opportunity.

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Redefining Education's "Normal," New and Old

Patrice Maynard

COVID-19's Lockdown

An *Education Week's* recent opinion piece by Alfie Kohn, "The Accidental Education Benefits of COVID-19,"¹ makes a strong case for adopting practices developed to cope with the lockdown of the past months as permanent improvements to our educational system. Even more, Kohn makes a strong case for permanently abandoning practices that have been suspended during the pandemic response. He cites three particular practices that should remain off the educational slate: *standardized testing* (because it is not a true indicator of success in the arenas where it counts); *college admissions testing* (because it is not a true indicator of academic performance after freshman year); and *grading* (because it encourages shallow thinking in pursuit of good grades instead of depth in reasoning).

Repeated reported imaginings of what is to become the "new normal" make Alfie Kohn's opinion timely and topical. In New York State, for example, Governor Cuomo began imagining a "new normal" for education before lockdown restrictions were eased, teaming up with the likes of the Gates Foundation to decide on what re-opening school might be like (if it ever occurs).² The Governor's pronouncement about this "new normal" was announced to us before any research had been inaugurated on how the enforced home schooling was working for families, students, or for teachers and schools.

The "circle of experts" that the good Governor assembled (reminiscent of a similar circle assembled to create the Common Core State Standards—CCSS—under the Obama Administration) was remarkably lacking in experienced teachers. After enough protesting from the proletariat, a couple of teachers were added to the group assigned to re-imagine for us all. This was only one slice of a larger plan for our "new normal," that would make use of facial recognition to identify those who might have a fever, for example. Once identified, while walking along the street, perhaps, those who

failed the temperature threshold could be plucked off the street and quarantined. Normal? Not really.

The Story of the Old "Normal"

The question that remains largely unexplored as far as education is concerned might be: Was education, since the turn of this new century, ever "normal" in the first place? Continual pressure on students to perform along "performance-based" plans and "outcomes-based" reductionist thinking motivate the imagination behind the current plans. These plans measure, through testing, any number of things. They "prove," for example, that schools are accountable, that teachers are competent, that taxpayers' money isn't being squandered, that students are working up to expectations.

This approach to education is not so easy to trace in history, but it began, possibly, with George H. W. Bush's *Thousand Points of Light*, in the late 1980s, an agenda that included a thousand points for education. Bill Clinton's administration then reworked these points into the 1994 "Goals 2000: Educate America Act."³ This act included an urgent push to get education onto the "information highway" of the internet and followed the forming, in the 1990s, of the Circle of Governors for Education and the Circle of Businesses for Education. Compliance with the act was announced as "voluntary;" however, it became clearer as the years passed that to not "volunteer" to adopt these goals left states with diminished funding, both private and federal, along with general, cultural mis-approbation. These circles were based on the assumption that businesses and government leaders know best what the outcomes of education ought to be for a thriving economy and a civic society, and so they should know best how to dictate what the education ought to be to attain those outcomes. Governors were offered financial prizes for going along with the federal government. Through these two circles, with bribery as the lure, President Clinton usurped authority over education beyond what is allowed in the Constitution, removing it from the voters' approval and declaring it all "voluntary."

The forming of charter schools during this time further moved school choice into the hands of the government, creating an illusion of private school education

1 Education Week, Vol. 40.1, p.20. Print: August 19, 2020. www.EdWeek.org. Alfie Kohn is author of—among many other books—*Punished by Rewards* and *The Case Against Standardized Tests*.

2 Times Union, Albany, NY, May 6, 2020, "Cuomo looks to tech billionaires to 're-imagine education'." www.timesunion.com/news/article/Cuomo-wants-to-reimagine-education-with-remote-15248791.php.

3 Public Law HR 1804, www2.ed.gov

"for free." This designation of "free" ignores the fact that billions of dollars of taxpayer money poured every year into public school education and that billions of corporate dollars were earned at the expense of educational freedom and of our children. In the Waldorf school movement, there was great rejoicing at first that, with charter schools, a Waldorf school curriculum could be offered "for free." Public Waldorf school members have explained that, at first, these charters were allowed to operate without restrictions, but that over time they became increasingly restrictive. The outcomes of education had to conform to the government's requirements, and testing was mandatory to demonstrate that students were "performing" and that these requirements were met, whatever approach to getting to the goals was used.

During the tenure of George W. Bush, the 2001 "No Child Left Behind Act" (NCLB) was voted into effect.⁴ The Act established standardized testing as requirements for state governments. The authority of each state to minister to its own state-level school policies and educational approaches is granted through the United States Constitution. However, the NCLB was once again called "voluntary" and accompanied by pressure to adopt the common goals to avoid redundancy of states' formulating their own standards for education. When individual states began revising the NCLB provisions, they were instructed that only 15% of the document could be revised at the state level. States that responded by saying that they would reject the NCLB Act to develop their own educational standards faced a lawsuit from the Department of Education, headed at the time by Secretary Margaret Spellings. The law itself was over 900 pages long (Goals 2000 was 200+ pages long) and no one could identify who exactly had written it.⁵ According to its current Wikipedia entry, four authors are responsible for introducing this Act: Representatives John Boehner (R-OH) and George Miller (D-CA), and Senators Ted Kennedy (D-MA) and Judd Gregg (R-NH). It was clearly a bipartisan effort.

Until 2007, and since 1964, the Elementary and Secondary Education Act (ESEA) had been the guiding law for education in America. Constitutionally, states have authority over their schools while the federal

government holds no authority thereover. In 1790, when the United States Constitution was ratified, it was understood by many that a school system controlled by a federal government would produce a lack of variety in thinking, an arm of powerful control for a centralized authority over the developing minds of its citizens. Each state was empowered, therefore, to manage its own approach to education. The federal government was strictly excluded from rights in matters of education. In 2007, this ESEA law expired, after being re-enacted again and again over the decades with different changes. There was widespread recognition that the NCLB act was a failure, even a complete disaster. Few were willing to admit this aloud, but no politician had any imagination of what to put in its place. The only member of Congress lobbying for the repealing of NCLB was one of the original authors of the law, George Miller. The year 2007 bordered on an election year, and no one dared to touch this issue. Other issues crowded

in to distract from the questions of education. Standardized testing has become, and remains, the "proof" needed for accountability in this particular "new normal."

The unprecedented leap from classroom teaching and learning to remote, often online, screen-based teaching and learning ... is not without consequences, even if the immediate consequences are not clear.

The other element inaugurated with standardized testing and with universal, federally developed education standards for grades 1-12, was the full-on invasion of corporate intentions into education. At a conference at the Hawthorne Valley Waldorf School

in Ghent, New York, in August 2001, the appointed (i.e., not elected) head of the office of Non-Public Education in New York State at the time, Tom Hogan, addressed a room full of New York State Waldorf school representatives. The conference was called because New York State's Board of Regents had declared that if any student in our state did not pass the Regents' Exam, a test touted by the Regents to be harder than the standardized NCLB test, those individuals would not be granted a high school diploma and would be barred from all employment in state government jobs. When one teacher in the conference asked if the hours and hours of testing required and the test-preparation courses that accompanied them were harmful to children who need to move in order to think, the state official replied, "This is the biggest cash cow to ever come down the pike. No one wants to ask or answer that question."

The increasing pressure on children to perform well in school, which in turn proves that teachers are teaching and that schools are effective, came along with

⁴ Public Law 107-110, www.govinfo.gov

⁵ For a critique of this act, see: www.tecweb.org/eddevel/telecon/de99.html

the acceleration in the diagnosis of Attention Deficit Hyperactivity Disorder (ADHD). Behavior diagnosed as ADHD was addressed by medication aimed to correct it. Ritalin (a brand name for the stimulant Methylphenidate) was approved for administering to children by the FDA in 1962.⁶ Pharmaceutical companies have been criticized for marketing the diagnosis of ADHD as heavily as they have marketed the drug.⁷ A 1996 *New York Times* article reports an increase of 500% in sales of Ritalin between 1991 and 1996.⁸ Sales of Ritalin have increased at least 8% per year since. Though its use in controlling the behavior of children has raised ethical issues, and class action and other types of lawsuits have persisted around the drug, its use continues to increase.⁹

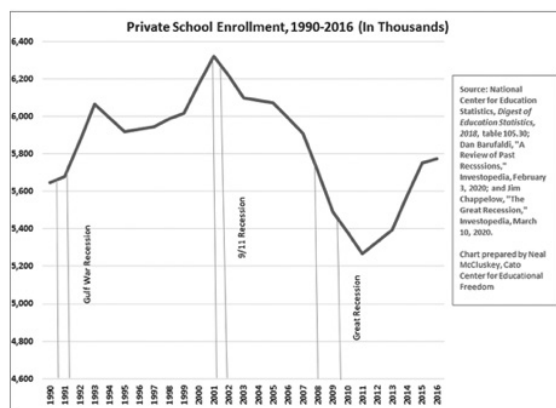
In his 1998 book, *Running on Ritalin: A Physician Reflects on Children, Society, and Performance on a Pill*, Lawrence H. Diller recounts his experiences with insurance companies as well as with distressed families who could not afford additional medical office visits beyond what their insurance companies cover. In effect, Dr. Diller, a behavioral and developmental pediatrician, found himself severely restricted in his possibilities to extend long-term care to children struggling in school. Prescribing Ritalin seemed almost his only choice under the circumstances.¹⁰ "Encouragement" from schools to prescribe Ritalin added to the pressure this pediatrician felt. More recent critiques of the epidemic of ADHD diagnoses can be found in books like *The ADHD Explosion: Myths, Medication, Money and Today's Push for Performance*¹¹ and numerous articles, some stark and urgent, such as the review bearing the same title, "The ADHD Explosion," published on the Association for Psychological Science website,¹² citing the ever increasing use of stimulants like Ritalin for increased performance.

Pharmaceutical companies show a clear example of one industry benefitting from the outcomes-based approach to education, encouraged and legislated by our government. Think further, though, to the

technology industry, the testing industry, the text book industry, food companies, school supply businesses, software companies, curriculum companies, and the empire of remedial support and consultants in the United States, all touting the claim that they can help schools and teachers meet the standards put out by the government.

The ESEA law was recast as NCLB expired, as stated, in 2007. Barack Obama was elected president, Arnie Duncan became secretary of education, yet no law was enacted to delineate educational guidelines, parameters, or funding. For eight years, the Obama administration dragged its feet on establishing or enacting any law for educational direction or financial support and administered all educational policy out of its own thoughts and pockets, amidst little outcry from the media or the public. During Obama's years in office, thousands of private schools closed, particularly after the 2008 financial collapse.¹³ In addition, and following along the practices of previous administrations, now with no laws to check the activity, the Department of Education lured states into agreeing to "common standards." The lyrics to this particular song went, 'Why set a state's own standards when we all want the same thing for our children? Let us do these standards for everyone!' Once again, the federal government stated, since it has no constitutional authority to interfere in education, that this was only what the states had asked them to do. It was, of course, "voluntary." The federal government's initiative,¹⁴ of course, came with funding attached to cooperation. However, when the Common Core State Standards (CCSS) were issued in 2010, again states learned that "voluntary" meant a restriction of changes to the federal government's document not to exceed 5-15%. Protests were silenced with bribes along

13 The Cato Institute, "Private Schools Face an Existential Threat," April 13, 2020, Chart of school closures 1990-2016. Note the plummeting numbers after 2008:



14 www.govinfo.gov, H. Res. 43 (IH) – Expressing the Sense of the House of Representatives in Support of the Common Core State Standards Initiative.

6 www.accessdata.fda.gov/scripts/cder/daf/index.cfm?event=overview.process&ApplNo=021284

7 See, for example, the PBS "Frontline" report "The Business of ADHD," <https://www.pbs.org/wgbh/pages/frontline/shows/medicating/experts/business.html>

8 "Boom in Ritalin Sales Raises Ethics Issues," www.nytimes.com/1996/05/15/us/boom-in-ritalin-sales-raises-ethical-issues.html

9 www.theguardian.com/society/2015/aug/15/ritalin-prescriptions-double-decade-adhd-mental-health

10 See Lawrence H. Diller, M.D., *Running on Ritalin: A Physician Reflects on Children, Society, and Performance on a Pill*, (New York: Bantam Books, 1998).

11 Stephen Hinshaw and Richard Schreffler, *The ADHD Explosion: Myths, Medication, Money and Today's Push for Performance* (Oxford, New York: Oxford University Press, 2014).

12 www.psychologicalscience.org/observer/the-adhd-explosion-2

the lines of, 'We'll give you a waiver on strict timelines and financial requirements, so long as you tow this CCSS line.'

The financial opportunities abounded following this with curriculum aids, software, hardware, and many consultants, reaching all the way through to our Waldorf communities, charging high fees to explain to schools how to comply with the CCSS. Fear and anxiety were common responses. There was little protest, refusal, or call for debate. A common sentiment among teachers was shock and disappointment that they were asked to offer so little of their experience in formulating the CCSS. The prevailing and officially unspoken prejudice, encouraged by the media, was that teachers are those who caused the need for such standards. These CCSS would call the teachers to task, it was reported, to make them prove that they are no longer getting away with sloth and incompetence.

It's clear when talking to public servants in Congress, who are involved in these educational matters, that a cynical view of their motives is only partially appropriate. Idealism shines through when it comes to children and their education. Senators and representatives in Congress, presidents and secretaries of education all speak with shining eyes of the wish for a good education for all children in America. And they mean it. *All of us mean well.* Still, an underlying attitude seems to be, 'If we can all make money on it in the bargain, well, what's the harm in that?' The old adage that tells us where we might end up when the road is paved with good intentions seems not to apply to us.

The whole distorted cubist-styled painting of our current education, dismembering the human form and putting it back together so that parts are recognizable but the whole form is a scrambled concoction, provides a wonderful picture of the urgent need for the three-folding of our society.¹⁵ No matter how elevated the motives, no matter how pure the intentions, when the sphere of human rights and politics, laced with economic interests, barges in on such a precious arena as a cultural activity, in this case education, the work tends to go awry and to end in chaos. Since the lockdown in response to the Corona virus pandemic, this has become even more exaggerated.

15 See Rudolf Steiner's *Toward Social Renewal* (London, UK: Rudolf Steiner Press, 2012).

Worldview Makes a Difference

Behind the trend of pushing for testing-validated performance is an imagining of what a human being, or a child, actually is. Reductionist or materialistic science leads to picturing the human being as a machine-like organism made up of material particles. Children, in this imagining, become like empty buckets who need adults (or computers) to fill them up with information. This imagination includes a philosophy of 'the earlier

the better – more years of practice to succeed on tests' that has crammed expectations of intellectual achievement on to younger and younger grades over the last few decades. The Common Core State Standards criteria includes a math curriculum for grades one and two that might have been expected in grade four a decade ago. The testing process empties the bucket for a moment and shows what has been kept in the bucket, then the bucket is set upright once more and the process

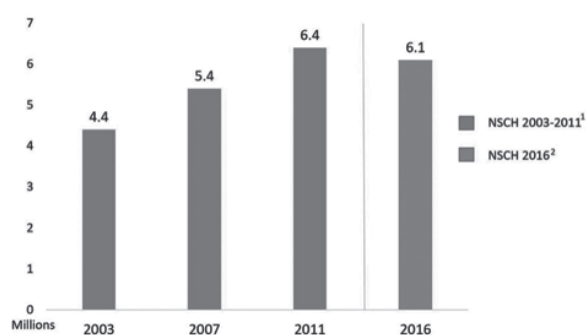
of filling up begins again. The message to the child in this view is that success means sitting still, staring for long stretches of time at a computer, absorbing information, and "proving" what is known in stressful hours of testing on a computer. "Be still and absorb," if difficult for a youngster, can be abetted by drugs, if need be. The CDC states that up to 62% of children in school are helped with these methylphenidate medications.¹⁶

This imagination of the human being and of children excludes the ephemeral and ethereal aspects of the human and runs directly contrary to the understanding of human beings or human development held in Waldorf education. Ineffable qualities that hold endless possibilities for transformation or "miracles" – qualities like love, inspiration, aspirations, trust, idealism,

Pharmaceutical companies show a clear example of one industry benefitting from the outcomes-based approach to education, encouraged and legislated by our government.

16 Figures reported on the Center for Disease Control, Data and Statistics on ADHD, citing the 2018 study, "National Prevalence of ADHD and Treatment: Information on children and adolescents, 2016"

Estimated number of US children who ever had a diagnosis of ADHD



imagination, compassion, inspiration, empathy, dignity, sympathy, forgiveness, gratitude, enthusiasm, antipathy, humility, integrity, kindness, or justice—have little or no place in a mechanistic view of human development. In Waldorf education, these qualities are held as essential to a child's wholesome development, yet there is no effective test to measure these vital qualities.

Waldorf teachers understand that without enthusiasm for a task, or love of a task, little deep learning can occur. Love is an essential part of a Waldorf teacher's "job" in teaching. Trusting a child's destiny and purposefulness in being born allows for limitless possibilities for transformation. The love a teacher practices on behalf of children in Waldorf schools makes envisioning such love on behalf of every child possible and enhances the understanding of development by way of support. The sentimentalized or sexualized popular understanding of love can make some feel that the approach of a teacher's love is not rigorous or appropriate. This would be a false interpretation. The opposite is true. The strong bond between teacher and student calls the child to be moved in feelings, stimulated in thinking, and called from his or her own wishes to getting the things done that are being asked. Love in its truest sense engages the whole human being, the whole child.

Love makes a child feel recognized in striving; it motivates the child's will to work in response to the warmth from and for a teacher felt deep inside the child. Idealism coursing through a child's consciousness builds strong and healthy physical organs; it helps muscle tissue attach to the bone soundly and bolsters a child's immune system.¹⁷ The child can sense that he or she is considered with dignity and respect for the individuality inherent within one. The child feels seen and appreciated. Hope and optimism blossom in the youngster's soul and aspiration becomes possible. Miracles become possible. Everyone knows that each human being ripens to skills on different timelines. To hold a child to an artificial timeline for developmental and academic achievements that apply to all, rather than to the individual child, is to doom a large percentage of children to failure at a very early age. To name two classical examples: Robert Frost, United States Poet Laureate 1958-1959, did not read in the measurable sense we use the word now until he was fourteen or fifteen years old, while Albert Einstein, brilliant physicist

of the twentieth century, reportedly was unable to tie his own shoes in elementary school. Both would have been cast as failures in our current system. Would these geniuses have been able to achieve what they achieved in light of such a branding?

It is easy to see why such an unusual view of child development would arouse suspicion, even derision, in a reductionist paradigm. Terms like "spiritual" push critics to an instant relegation of Waldorf education to the status of religion, and, therefore, dismissible as an actual "method," whereas the real difference between Waldorf education and the contemporary mainstream is that of worldview, not of belief or dogma. Waldorf teachers the world 'round, teachers of many faiths, races, and cultures, hold this view of child development and succeed with the children entrusted to them. Waldorf schools enjoy a track record of success now 100 years strong.¹⁸

For at least thirty years, we have had hard data on testing results of American children in the throes of the current educational experiment. Bill and Melinda Gates and Steven Jobs were made wealthy (also) through convincing our culture that all children need computers in order to learn and to succeed in school in the late 20th and the 21st centuries. As a culture, we were beguiled into believing that information is knowledge, or that access to information makes us smart and wise. It might appear that infatuation with the latest "magical device" of computer capacities, scrolling tricks and thrilling speed, drove us all to wish that computers would solve the mystery of education.

The federal government requires schools to ensure minimum levels of technological competence among their students. These "unfunded mandates" from the federal government¹⁹ are draining public schools of needed funding for teachers to sustain essential school programs while driving up sales of technology hardware and software. The corporate world's hold on public schools and its spill-over into private school education remains vice-grip tight in spite of protests, despair, and supporting statistics. Studies abound on the dangers of

Children, in this
imagining, become
like empty buckets
who need adults (or
computers) to fill them
up with information.

17 Jo Marchant, "How Happiness Boosts the Immune System," *Scientific American*, November 27, 2013.

18 Change to "For an encompassing assessment, see Nana Göbel, *The History of Waldorf Education, Worldwide* (Hudson, NY: Waldorf Publications, 2020).

19 See an NPR's "All Things Considered" report, "New Federal Rules for Distributing School Money: An 'Unfunded Mandate'?" <https://www.npr.org/sections/ed/2016/08/31/492071491/new-federal-rules-for-distributing-school-money-an-unfunded-mandate>, August 31, 2016.

online learning: distraction; physical damage to eyes, ears, brain development; behavioral disorders; and the high level of addiction apparent from frequent screen use.²⁰ Nicholas Carr, in research reported in his book, *The Shallows: What the Internet is Doing to Our Brains*,²¹ calls for attention (which is what is eroding) to the changes we are prompting with online living.

Ironically, academic performance in the United States—the result of a government-guided sculpting of education on every level, using the tools of screen technology and drugs—when measured in comparison to other countries, could be called mediocre, at best. In 2020, the United States overall education ranking placed it at number 26 among 36 industrialized countries.²² In 2015, the United Nations annual Human Development report ranked the United States 8th among nations on its Education Index.²³ (According to Investopedia, the USA was rated first, or—depending on the lens used—second only to China in economic dynamism.²⁴ However these measures might be interpreted, our priorities as a nation are fairly clear). When these results are reported each year, the reaction around the political/educational community seems to be consistently, “Dig in harder on what is already not working. Don’t disturb the robust market.” Another instructive irony is here: as federal spending for education increases, “performance” declines.²⁵ This could lead to a rational hypothesis that we are not, after all, really investing in education at all.

A Culture of Despair or a Culture of Enthusiasm?

In the United States, suicide is the second-leading cause of death for older teens and young adults. The suicide rate has been increasing alarmingly in recent years. The Center for Disease Control (CDC) reports that from 2007 through 2017 the rate of suicides in this age group grew from 6.8 deaths per 100,000 people to

10.6.²⁶ Suicide rates in youngsters aged 10 to 14 years have tripled in the same time period.²⁷ The CDC identified suicide as the second leading cause of death in these age groups.²⁸

What could make a child feel the level of despair, helplessness or uselessness to take such a radical action as to end life? Surely there is something urgently important to examine here as we proceed. Waldorf teachers know that our primary task in the elementary and pre-school years is to protect the young entrusted to our care. Understanding child development is a primary tool in building lessons that meet the child’s capacity for comprehension and bearing on the emotional level the darker things in our world. Teachers understand ways to help children in pre-school and elementary years to digest the world in ways that are digestible, in a childlike, story language. This gives young children sound sleep, a sense of well-being, and reasons to rejoice that they were born. Teaching in ways that intellectualize things in early years causes stress to the young. Presenting material that burdens young souls with heavy issues clearly can be deadly.

By the time a student reaches seventh or eighth grade, a healthy youngster will begin articulating issues and causes identified in his or her own soul, signaling readiness to take on issues that emotions have been allowed to grow strong to endure. Teaching in ways that focus on what the child does not know and

does not understand undermines the child’s developing soul and developing confidence. Handing children low testing scores, starting at age seven or eight, runs the risk of reinforcing a young person’s feelings of doubt or inadequacy.

The 2010 film, “Race to Nowhere”²⁹ profiles a 13-year-old girl, an “A” student, who took her own life the day she received a “C” grade in one subject. Many already know that as parents and as teachers, our enthusiasm for the child’s existence is a key component in a child’s survival. The chance we have now, of looking closer at the way we teach and the way we assess a child’s

The strong bond between teacher and student calls the child to be moved in feelings, stimulated in thinking, and called from his or her own wishes to getting the things done that are being asked.

20 Victoria Dunckley, *Reset Your Child’s Brain: A Four-Week Plan to End Meltdowns, Raise Grades, and Boost Social Skills by Reversing the Effects of Electronic Screen-Time* (California: New World Library, 2015).

21 Nicholas Carr, *The Shallows: What the Internet is Doing to Our Brains* (NY: W. W. Norton, 2010).

22 See the World Population Review ranking of education at worldpopulationreview.com/country-rankings/education-rankings-by-country

23 en.wikipedia.org/wiki/Education_Index

24 www.investopedia.com/insights/worlds-top-economies/

25 www.theguardian.com/us-news/2018/sep/07/us-education-spending-finland-south-korea

26 www.healthline.com/health-news/teen-suicide-rate-spikes-56-in-9-years

27 www.westernjournal.com/suicide-rates-among-children-10-14-years-old-tripled-experts-blame-social-media/

28 www.prb.org/suicide-replaces-homicide-second-leading-cause-death-among-us-teens/

29 www.amazon.com/Race-Nowhere-Vicki-Abeles/dp/B01DAK0XG8

progress, can contribute to the child's deep sense of belonging and succeeding, or not.

Possibilities for the Future

The pandemic has pushed us all into an alternative reality. Waldorf schools and teacher education institutes have sprung flexibly into new approaches to regular school that deserve commendations. Every approach used, from complete dormancy or closure to online schooling only, and combinations of both, has been employed by all, including our Waldorf communities. Forgiveness and a minimum of harsh judgements are in order in light of the emergency we face. In addition to suspended judgement, however, we can recognize that opportunities are plentiful in this pause. We now have choices to make and research to fulfill as the pandemic enters new phases and, with luck, subsides (as slowly as this may occur). Alfie Kohn identifies one very good idea in his recommendation for suspending testing. This is only one idea of the many possible. As we have found ourselves prohibited from being together, and as we are sent home in waves for protection and caution, screen technology showed itself as a marvelous asset, for those who have it. Yet, this is hardly the entire reality of it.

In the Waldorf community, we entered the virtual reality of the internet delivery of teaching already knowing that a screen class, a virtual class, is no substitute for actual meeting, for heart-to-heart teaching and learning. Most teachers already know that enthusiasm slides away without human contact with warm attention in it. The weeks of online schooling underscored what we in the Waldorf community and in most of the teaching community knew before the pandemic struck. Only about a third of the work assigned to stay-at-home students is, on average, expected to be completed. Classes online are often followed with a feeling of complete exhaustion in adults and overtired hyperactivity in the young. Keen observation and interested analysis are in order to understand on a deeper level why these phenomena happen.

The risks involved in screen technology did not disappear with the ushering in of the pandemic, or with the necessity to use such technology in order to continue teaching on one level or another. What will we do next? As schools cope with outdoor classes and hybrid courses, with fear of illness, with the need to protect students and teachers, and to follow complex procedures and restrictions mandated by local and state

governments, added to unnerving feelings of disintegration and separation, we should engage in research that will inform as to what human beings do in unusual situations, and especially what young human beings do.

Over the past summer, teacher preparation centers worked to imitate on-the-ground training with online classes. Many who previously could not attend in-person classes due to expenses associated with room, board, and travel, in addition to tuition, were now able to take training classes online. Decades of criticism of those who attempted online trainings, and past commitments to using only low percentages of online teacher development, were pushed aside. A rich discussion, after the "coping" time period is over, is in order; such a discussion could examine what exactly is teacher preparation, or at least what it might be ideally, what it takes to engender the necessary transformation to become a teacher, and what is the meaning of "artistic transformation," as we use the term in Waldorf teacher preparation. It's a rare and golden opportunity for revival and discovery.

Binarism or duality is the realm of computer reality. The extraordinary variations on this duality that create our internet world are impressive, but still are born from 0 and 1 only. Two possibilities and remarkably endless combinations of 1 and 0 is all there is in computer land.³⁰ The two-dimensional experience of a picture of a person on a screen is not an entirely human experience. The seventh-grade physics lesson that uses mirrors can explain a lot about this insufficiency. While some elements of self-examination are possible through the mirror image, the same is not true concerning the examination of or interest in the "reflection" of another — at least as compared to the experiences we have in person. Mirrors can generate awareness of the real vs. a reflected reality. Rudolf Steiner continues to teach us through his lectures and books on threefoldness. This threefoldness reflects the authentic archetype of the human being and the experience of human development: thinking, feeling, willing; head, hands, heart; you and I are we. In that space between the duality of two, comes the possibility of sharing, the mighty teacher of the heart, the light, the warmth, the glory of transcendence. Duality cannot get us there.

30 For an in-depth examination of the implications of this duality see: Paul Emberson, *From Gandhishapur to Silicon Valley* (volume I) (Switzerland and Scotland: Etheric Dimensions Press, 2009).

In Waldorf schools we work as teachers to educate and transform our feeling life through artistic work, processing all learning through the arts: drama, speech formation, singing and playing music on instruments, painting, sculpting, woodworking, handwork, Eurythmy, dance, wood and metal work, handwork, reviewing what we have learned. Through this artistic process, real evaluation and deep learning comes. In the peer-reviewed book, *Assessment for Learning in Waldorf Classrooms*,³¹ Helen-Ann Ireland and Sara Ciborski thoroughly describe the steady, careful assessment that comes in this three-folded experience of teacher-student-class. Keen observation, enthusiastic rigor in cultivating clear thinking, and trust in the imponderables abounding in every human heart – these three touch the yearning in the young to be recognized and set free through learning.

As we discover together in genuine review and evaluation, as the pandemic eventually leaves us, those things to cherish and those things that have been helpful about this time of pausing from the frantic pressure we called “normal,” let’s join with Alfie Kohn and go further, as thought-leaders and practitioners in education about authentic and in-depth learning. Taking a stand on the knowledge we have of being human can avoid not only the tool of testing, but can also allow us to imagine an education that genuinely frees us all toward *The More Beautiful World that Our Hearts Know Is Possible*, to borrow the words of Charles Eisenstein.³² All who work to understand the mystery of a growing youngster can insist that we, as a community, stand firm to avoid a rush to do again what was already crushing the high spirits of children and teenagers, of teachers and parents. Let’s insist together that the “new normal” assess on a human scale, not on a two-fold screen with high stakes performance of shallow testing. Let’s proceed with deep, three-dimensional, thinking, human hearts, intelligent hands, and flexible and wise minds. Children who imitate our own hearts, aflame with love and enthusiasm, can light the world and light the future.

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31 Helen-Ann Ireland, Ph.D., and Sara Ciborski, Ph.D., *Assessment for Learning in Waldorf Classrooms* (Washington D.C.: Academica Press, 2015).

32 Charles Eisenstein, *The More Beautiful World Our Hearts Know Is Possible* (New York: Penguin Random House, 2007).



The Corona Virus from a Medical Point of View

Questions and Considerations¹

Michaela Glöckler

How Did the Pandemic Start?

On January 7, 2020, the novel Coronavirus was already identified as SARS-CoV-2. The developmental steps at the outbreak of the pandemic were rapid: after the Coronavirus probably infected a human being for the first time at a wildlife market in the central Chinese metropolis of Wuhan which, looking back, is said to have happened November 2019, the country reported 27 cases of pneumonia of unknown cause to the World Health Organization (WHO) only on the last day of December. It is not until January 1, 2020, that the authorities closed the Huanan market. During these months, 30,000 travelers were still leaving the Wuhan traffic hub every day for destinations all over the world, until the city was sealed off on January 23. At the same time, Taiwan was arranging for travelers from the region to be checked on arrival. Taiwan, which is a democratic country, has since been considered a model in the fight against the virus. Taiwan was also the first country to inform WHO, even before China, but the disease control authority did not react at that time.

On January 9, the first patient suffering from SARS-CoV-2-associated pneumonia died. By now experts were becoming alarmed, since the last Corona epidemics – SARS, MERS – had proved to be extremely dangerous with high death rates. On January 12, a Charité University Hospital Berlin team, headed by virologist Prof. Christian Drosten, developed a PCR test method. The next day, the first case of infection outside China was discovered in Thailand, two days later in Japan and South Korea. On January 30, WHO declared a "Public Health Emergency of International Concern" (PHEIC).

Since the new lung disease, given the name COVID-19 by WHO, has become known, hardly a day has passed without the latest news about the spread of the pandemic, which is now worldwide, being communicated in the media. Reports outline the enormous socio-political and economic consequences governments predict the disease will have on the life of individuals. As a result, the consciousness of us all has suddenly changed; economic life has suffered massive losses; cultural life including studies at universities, schools, and kindergartens has come to a standstill; social contact is dramatically reduced and, in some cases, completely

banned; and the accustomed personal and social liberties in democratic societies are suspended.

Over all of this hangs an omnipresent cloud of fear. What used to be regarded as a normal cold, cough, or a flu in the making may now cause panic and threaten to overwhelm the outpatient clinics and the telephone lines of doctors' practices. Images of horror, for instance from Italy, have entered our consciousness via the TV news and the internet, and some people already see themselves on their way to the grave or imagine what it is like to suffocate.

Having been in contact and email communication on these issues with many people over the past few months, I notice a number of questions and considerations that repeatedly turn out to be particularly relevant; I want to focus my contribution in this essay on these questions. Even though it is certainly too early at this stage to find satisfactory answers to the many questions that concern us, it is nevertheless important, especially now that there is time for many people to do so, to exchange ideas on how we can understand this pandemic, how long it will last, what the consequences will be, and how we can make the best of this crisis, which affects each of us in very different ways.

However, as a supporting member of *Médecins Sans Frontières MSF/Doctors Without Borders*, I would like to take this opportunity to say something about this organization. I follow the enormous efforts by MSF to research the situation on the ground in underprivileged countries, to provide organizational advice wherever possible, and also to help directly. There are hundreds of thousands of people in these countries who are already struggling with chronic diseases such as HIV, hepatitis, or tuberculosis, and who are therefore particularly vulnerable to the new virus. Not to mention the Rohingyas who have fled persecution in Myanmar, who have to live together in tightly close quarters in

1. This article is included in Michaela Glöckler, Andreas Neider, and Hartmut Ramm, *Corona - eine Krise und ihre Bewältigung: Verständnishaften und medizinisch-therapeutische Anregungen aus der Anthroposophie (Corona – A Crisis: How Do We Overcome It? Aids and medical-therapeutic suggestions to gain an understanding through Anthroposophy)* published by Akanthos Akademie for Anthroposophic Research and Development, Stuttgart, 2019. The English translation, prepared by Astrid Schmitt-Stegmann, was revised for the current publication.

refugee camps, where distancing rules and frequent hand washing can only be a dream. Correspondingly great is the concern for those who feel co-responsibility for these people.

I do not want to miss the opportunity to highlight MSF as an example of the many initiatives, large and small, that try to get a picture of the situation on the ground, despite all the concern that perhaps they may be putting themselves in danger. They want to do what is organizationally and practically possible and feasible without fear and with much empathy. Such an engagement deserves our support, gratitude, and deep respect. A book on this subject was published a few years ago under the title "Courage and Humanity."² Medicine wants to serve the whole of humanity – it belongs to everyone, but it is available to people in very different ways. How this can be changed is also a question about which we are becoming more conscious due to the Corona crisis, and I hope that some of what has been put forward here can help to find an answer to this broader issue. In any case, it is fortunate that civil society is becoming increasingly active where government leaders fail. This activism is also a necessity, and without it less and less will be possible. We are all in the same boat and everyone can contribute to the "Corona turn-around."

Why Is COVID-19 More Dangerous Than a "Normal" Virus-Flu?

Although eventually the number of cases was not as large as originally feared, mortality was high in the Severe Acute Respiratory Syndrome (SARS), which originated in China in 2002 and was probably transmitted by bats. Shortly after it was identified and detected, the disease was found to have infected 8,000 people, with 774 fatalities, or 10% of infected patients [the ratio was later adjusted to 15%]. The Middle East Respiratory Syndrome/MERS-CoV, transmitted by camels, was first identified in Saudi Arabia in 2012, with a recorded fatality rate of 35% of those infected.

The *Coronaviridae* family is large and responsible for a wide range of diseases in humans and animals. Although these viruses usually cause only a cold in humans, they can also lead to life-threatening conditions. Even though the complication rate for COVID-19, as far as

the statistics indicate so far, is significantly lower than in previous Corona epidemics, COVID-19-associated pneumonia is particularly troubling. Due to the inflammatory swelling of the fine connective tissue surrounding the airways and pulmonary alveoli, pneumonia initially begins insidiously, but can then suddenly take on highly dramatic forms, requiring intensive medical care and even artificial respiration. This distinguishes the disease, for example, from the classical pneumo-

It is nevertheless important ... to exchange ideas on how we can understand this pandemic, how long it will last, what the consequences will be and how can we make the best of this crisis.

nia caused by pneumococci, which usually begins with acute symptoms such as fever, physical weakness, and great discomfort that force the patient to go to bed; since the classical pneumonia is caused by bacteria, it can be treated with antibiotics if necessary. By contrast, pneumonia caused by viruses is called atypical because it is not the alveoli themselves that swell up, as in pneumococcal pneumonia, but the connective tissue between them.

This can begin slowly, then suddenly become dramatic and acute, triggering a sensation of drowning. Then, in addition to oxygen administration, intensive medical care, including artificial respiration, is usually necessary.

In contrast to classical pneumonia, which can be treated with antibiotics, conventional medicine has no specific medication to stop the activities of the virus. There are so-called antiviral drugs, but these are not specific to COVID-19 and have significant side effects. Therefore, the treatment of virus-related diseases relies on vaccinations and, if available, treatment with specific antibodies, the so-called hyperimmune globulins, which can deactivate the virus. However, these can only be obtained from organisms, including humans, who have overcome the disease and, by overcoming the disease, have been able to form the corresponding immunoglobulins.

This treatment option will probably become possible in the future but is not available at the time of this writing. More interesting in this context is the fact that most patients in China have relied on traditional Chinese medicine during the crisis, and that the supportive therapy methods of homeopathy and anthroposophic medicine seem to be proving their worth in Europe as well. In any case, we will be eager to evaluate patient records after the crisis has subsided.

What Are Viruses?

The word "virus" comes from Latin and means "slime, poison, drool." It was introduced into medicine by

2 Tankred Stöbe, *Mut und Menschlichkeit. Als Arzt weltweit in Grenzsituationen* [Courage and Humanity: As a Doctor Worldwide in Border Situations], (Frankfurt am Main: Fischer Verlag, 2019).

the Roman encyclopedist Aulus Cornelius Celsus (25 B.C.– 50 A.D.). His eight books on the medical disciplines were first printed and widely available in the 15th century. Many of his suggested treatments—for example physiological fever treatment for inflammation—still make sense today. As electron microscopes were not yet available at that time, it was only possible to identify liquids such as saliva and other secretions and excrements, or polluted water, as cause of disease, but not the underlying perpetrators of the problem. Accordingly, virus research is a child of the 20th century. We have known the Coronaviruses since the late 1960s. But it is only since the invention of cryo-electron microscopy, for which the Nobel Prize for Chemistry in 2017 went to Jacques Dubochet (Switzerland), German-born Joachim Frank (United States) and Richard Henderson (United Kingdom), that the visualization of individual biomolecules has been possible. This method simplifies and improves the visualization of biomolecules to such an extent that it has initiated a new era of biochemistry.

Under the heading *Pandemics and Their Causes: How Humans Unintentionally Breed New Epidemics*, the science journalist and biologist Philip Bethge published on April 3, 2020, in the science section of the German magazine *Der Spiegel*, a remarkable contribution.³ He writes that the outbreak of the current pandemic was not accidental. Species extinction, destruction of nature, and climate change have long increased the risk of diseases spreading from animals to humans. Bats and flying foxes [a genus of megabats] are particularly suitable hosts for this disease, with a good 3,200 different Coronaviruses already identified. Although we do not know how long it took for SARS-CoV-2 to make the leap to humans, we do know that these are classic evolutionary mechanisms that can cause such epidemics, with humans playing the leading role in spreading the virus. Time and again, pathogens jump from animals to humans. This so-called zoonosis is increasing worldwide. Why? Population growth and destruction of nature, species extinction, and climate change promote the emergence and spread of such pandemics because the associated disruption of habitats causes and promotes the crossing of species boundaries.

But how should we understand this? In order to do so, we must first understand a number of things about the special nature of viruses.

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A virus is not a living being in its own right. It consists only of a shorter or longer piece of genetic material either of the type DNA (DNA viruses) or RNA (RNA viruses). This is surrounded by a differently shaped protein capsule or envelope, which is often geometrically shaped. Thus, the Coronavirus owes its name to the beautiful spherical shape it has. What many people know only from scientific research and its application in medicine and agriculture as genetic engineering, gene technology, or gene manipulation is based on the study of the natural way of life of viruses. It is normal for viruses to introduce themselves into foreign cells as a piece of genetic material. Either they can coexist peacefully with their hosts while modifying their genetic material, or they can destroy the host

and look for new cells, as is the case with virus-related diseases, until the immune system stops this activity. The fact that it is possible to change organisms by introducing certain genetic material sequences has always been the “daily business” of viruses and not an invention of humans. Without penetrating a well-functional cell of bacteria, plants, animals, or humans, viruses can survive only for a short time. In sunlight and heat, they are quickly destroyed; in moisture or even in ice they can remain active for a long time. What classical genetics used to call “genetic coincidence” or “spontaneous mutation”—sudden changes in the genome—is, as we know today, essentially the work of such viruses. Even if research in this field is only decades old, including the new aspects brought by epigenetics and the modern genetic understanding with regard to an open developing system, enough is already known today to highly respect these “genetic assistants” in the evolution of the world of the living. They are, so to speak, “mobile genetic material” that serve predominantly to the benefit of their host organism and not to its detriment.

However, if the system is irritated, they can develop pathogenic, i.e. disease-causing, properties. Whether viruses, as do bacteria, play a positive role in human health or cause disease depends on the condition of the organism and its environment. They can also trigger different diseases, depending on the climate and location. A well-known example of this is Pfeiffer's glandular fever (mononucleosis). It is caused by the Epstein-Barr virus. However, in Africa, the same virus can cause Burkitt's lymphoma, a malignant lymph gland disease. In China it is responsible for a certain form of throat cancer. Viruses adjust the way they work on the situation of the environment, and on the host organism into which they enter. Thomas Hardtmuth has written a very readable essay on this subject. He uses many

3 <https://www.spiegel.de/wissenschaft/natur/pandemien-und-ihre-ursachen-so-zuechtet-der-mensch-ungewollt-neue-seuchen-a-00000000-0002-0001-0000-000170323296>

examples to illustrate the context-dependent nature of viruses as highly malleable genetic information carriers or information mediators.⁴

Based on this aspect, it is also easy to understand why it is so difficult to produce vaccines against certain viruses, because they change faster than a vaccine can be produced, and the mode of action of viruses in human constitutions differs. We also all know only too well that, despite the introduction of flu vaccination against a particular strain of flu virus, flu as such cannot be defeated because there are still enough other modified viruses that can cause the disease. Thomas Hardtmuth summarizes the results of his research so far:

From a systems-scientific perspective, viruses in their entirety (virosphere) represent the mediating medium of a global, genetic communication among organisms. The genomes of individual organisms are therefore less the result of random mutations, but can be understood as peripheral-and context-dependent, evolutionary new arrangements of this basically dialogically organized system of the virosphere. [...] The high genetic plasticity, adaptability, and mutability of viruses has been internalized and conserved through innumerable developmental steps in the highly complex intracellular RNA elements of the genetic “text processing” of all living organisms which mediate as an epigenetic regulator between environment and organism and are thus the prerequisite for further development and biodiversity. Viruses have a dual nature in that they are both genetic stimulators and pathogens. Against this background, their pathogenicity proves to be merely a special case in the sense that they are susceptible to stress and disruption of every innovative, living development.⁵

This does, however, answer the question why people, through their modern lifestyles and economic systems, are decisively co-responsible for something like the Corona epidemic/pandemic.

Thomas Hardtmuth refers in this context to Günther Witzany's concept of biocommunication:

As has become apparent in recent years, the infectious, highly dangerous effects of viral infections are a kind of special case and characterize those viruses

that cannot develop a permanently sedentary lifestyle in host organisms. In most cases, viruses live in a host organism and help it to fend off competing parasites [whereby it achieves a higher level of immunity]. Thus, they often become part of the evolutionary history of the host organism or the whole host species. Sedentary viruses are crucial for species diversity and host genome processing. Practically all competencies of natural genome processing, as represented in the conservation of gene reading, transcription, translation, and recombination (with all its steps and intermediate steps), derive from viral capabilities. [...] Since it has become clear through several observations that viruses are capable of integrating genetic material into host genomes, it has become clear that viruses have symbiotic and symbiogenetic lifestyles in addition to infectious life strategies. They transfer phenotypic characteristics to the host that a non-infected host of the same species does not have. As endosymbiotic viruses that depend on host replication, they are part of the host history by becoming heritable and thus part of the genomic identity of the host.⁶

Just as today the microbiome of the intestine is increasingly being researched in its significance for the health and illness of the human organism, viral research will increasingly reveal the basis on which the human epigenome is lastingly influenced “at every moment of our lives”: “by diet, lifestyle, habits, diseases, by our mental state – even by our formed mental images, that also have their genomic correlate.”⁷ As an example, Hardtmuth cites, among other things, the fact that people today can digest starchy food well because they have genetically acquired this ability by integrating a nucleotide sequence from a virus that encodes the expression of the necessary amylase gene in the salivary glands. We are usually not clear about how

much we owe to this “wandering genome” in its wise ways and that a major part of the human genetic material is due to the integration of viruses during evolution.

Why Do Human Beings React So Differently to a Virus?

From the foregoing, there is already some evidence that helps to answer

the question posed above. It is not only “the virus” that causes disease, but the interaction of the individual constitution with this intruder. We know exactly why a

Therefore, it is clear with regard to Corona: The virus is the reason for this specific form of disease symptoms, but not the cause!

4 Thomas Hardtmuth, *Die Rolle der Viren in Evolution und Medizin [The Role of Viruses in Evolution and Medicine] – Versuch einer systemischen Perspektive*. In: *Jahrbuch für Goetheanismus*, Band 36, Stuttgart 2019, p. 3-61.

5 Hardtmuth, p. 3.

6 Günther Witzany, *Biokommunikation und natürliche Bearbeitung genetischer Texte – die Anwendung der sprachpragmatischen Philosophie der Biologie*. Norderstedt 2010, p. 121. Quoted in Thomas Hardtmuth, op. cit.

7 Thomas Hardtmuth, op. cit., p. 27.

mother usually does not get the flu when the whole family suffers from it – at best she gets it when the family system is back in balance and she needs to sleep. Even the young doctor's assistant or the nurse newly employed in the infectious disease ward often has an "initial infection." The fear of possible infection does not exempt medical professionals; moreover, every new beginning of wide infection is associated with encounters with the unfamiliar that makes people feel insecure, creates stress, and can upset an individual's health balance, so that it is easier to become infected by a carrier. Why do we speak of a cold? Because hypothermia or too much draft also disturbs the fragile health balance, as does too little sleep, irregular or unhealthy eating patterns, etc. In large cities and urban centers, air pollution adds to the undermining of this health balance and is anyway a great challenge for the respiratory tract; it will remain so for as long as we do not orientate our transportation and industrial production processes towards a more human friendly ecology. Every organism has to deal with surrounding damage of all kinds on a daily basis.

This imbalance is compensated by an organism's adaptable immune system as an essential factor of the body's own self-healing powers. In addition, there are the differences in social circumstances mentioned above. Seen in this light, illness and health are not opposites – rather, they are a continuum of *illness* and *healing*. Health, on the other hand, is a fragile state of equilibrium between the ever-present factors of illness and the healing and regenerative compensation possibilities that the body possesses. This is why the question is so important: What strengthens the body's healing and compensatory capabilities and what weakens them? These are the basic questions of current health-, resilience- and salutogenic-research.⁸

Therefore, it is clear with regard to Corona: The virus is the *reason* for this specific form of disease symptoms, but not the *cause*! We can be quite sure: Anyone who has developed a disposition for disease—for whatever reason—will sooner or later encounter a virus that triggers a flu-like infection, quite independently of Corona. Quite a few who had to fight with influenza during these past months and had themselves tested for SARS-CoV-2 (COVID-19) were almost a little disappointed when the

test turned out negative for COVID while other viruses could be detected.

If the virus were actually the cause of the disease, practically everyone would have been infected during the flu epidemics, because these were not accompanied by restrictions regarding social contact. The example of the Corona epidemic also shows that most people who contract the virus do not fall ill or become only slightly ill with a cold and a little cough. The fact that, for the first time in the history of humanity, a slowing down of the infection rate through "social distancing" in the truest sense of the word is to be achieved with all possible force is due to the concern in the current virus invasion that the existing supply

capacities of the health care system may not be sufficient for the seriously ill, because we do not know how many of those infected will become seriously ill.

Why Is the Disposition to Become Infected So Individually Different?

Those who have a stable immune system and good self-healing resources are resistant and can protect themselves. The body quietly mobilizes its immunological defense against disease so that the viral invasion is not noticed at all, or only slightly. Those who do fall ill, however, may wonder why their body's own protective function has failed, so that the infection with SARS-CoV-2 can take hold with more or less severe symptoms. Depending on what is considered the cause for a weakening of the immune system, we can then help ourselves in a more targeted manner. In addition to the above-mentioned possible causes of hypothermia and certain lifestyle elements such as sleep, diet, lack of exercise, or low stress tolerance, mental and spiritual factors can also play a role.

Anyone who suffers from herpes blisters caused by the herpes virus, for example, knows only too well in which context they appear and then disappear again. The virus remains in the body, but it only becomes virulent if the appropriate conditions are present. This is also used diagnostically by measuring the activity of herpes viruses in saliva, and in stress research as an indicator of chronic mental stress. It is also well known from psychoneuro-immunological research how greatly motivation and positive feelings strengthen the immune system. In addition, salutogenesis and resilience research also show how much influence on the health condition a spiritual orientation, religious faith, or an optimistic

⁸ See Michaela Glöckler, *Was ist Anthroposophische Medizin? [What is Anthroposophic Medicine?]* Wissenschaftliche Grundlagen, therapeutische Möglichkeiten, Entwicklungsperspektiven, Dornach 2017.

worldview can enable us to process constructively what life demands of us.

Moving examples for this are contained in books such as Victor Frankl *Man's Search for Meaning*, Jacques Lusseyran's *And There Was Light*, Hans Jonas's essay, "The Concept of God after Auschwitz," or the book, *Stronger than Hate*, by Tim Guénard, a severely traumatized child from France who was later described his path of a life filled with gratitude and joy. What kept these human beings alive—despite all the inhumanity they had to suffer or witness—was the awakening and ever strengthening certainty of their spiritual existence and destiny.

Taking all this into account, it becomes clear how strongly our *identity* correlates with our *immunity*. What we connect and identify with is what makes us stronger or weaker. The fate of countless refugees in our times also bears witness to high levels of endurance that is based on trust in God, in oneself, and in destiny, and that makes it possible for them to survive even the greatest hardships. The will to survive and the hope for a better life have such a potent effect that the immune system defies the damage wrought by overtiredness, heat, cold, lack of food and water, fear, and violence. The deadly impact of the Spanish flu that raged around the world in the wake of the World War I was due not simply to the virus, but to the condition of humanity shaken and traumatized by the destruction of familiar living spaces, as well as by fear, violence, hunger, flight, and many painful losses.

Dealing with Disease – Why Do Humans Face Different Problems from Animals and Plants?

In the natural world, diseases hardly ever occur; instead they appear only as "regulators" for ecological balance. Even wild animals do not know this problem: when an animal falls ill or suffers an injury, it is quickly eaten or dies because it can no longer feed itself. Otherwise, plants and animal species fall ill and become extinct because their habitats have been changed by humans; they are not able to adjust themselves to the new environmental conditions, their ability to exist is endangered or extinguished. The fact that illness or injury is different for pets is due to their symbiotic life with humans and the veterinary medicine associated with it. Living with illness—rather than simply dying from it—is something specifically human. Why?

In childhood and adolescence, acute infections predominate; between the ages of 20 and 40, people mainly voice psychosomatic complaints that are associated with their education and training, their career path, or the challenges starting a family. After that, sooner or later chronic diseases begin to set in which accompany us until the end of life. These "normal illnesses" are companions of every biography – though in each individual case they can be more or less pronounced or present only as a tendency. Those who say, "I have always been healthy" are ignoring the occasional cold or the diarrhea suffered on vacation. That is why doctors write in the medical history: Never been *seriously* ill.

But why is it this way with humans? Why don't we have the natural ability to adapt easily everywhere? Why in the course of our development do we react with illness to physical, soul, and spiritual irritations? These three forms of illness tell us this: because they all have indispensable positive side effects. Acute infections during the growing age promote the development of a stable immune system that prevents us in the best case from falling seriously ill in the course of our lifetime. Psychosomatic problems, on the other hand, cause us to look for ways and means to become more stress tolerant, to better cope with frustrations, to become more self-confident, and to stand for who we are. Many seek self-coaching and self-management or reach for spiritual training books, such as Rudolf Steiner's *How to Know Higher Worlds*, or do yoga or take a Zen course. The result is that our "soul immune system" stabilizes. We learn to get along better with ourselves and our environment.

As unpleasant as it may seem to some people, it is precisely these ailments and symptoms of illness that help us – they show us the way and wake us up for necessary learning goals. Birds, dogs, and cats cannot become more perfect than they are. So, what is the point of having to deal with symptoms of illness? Only we humans can learn and become more human throughout our lives. A bird, by contrast, would not become more "bird-like" by dealing with symptoms of disease.

And what positive side effects do chronic diseases have during the last third of life? They are often the occasion to ask questions of development and meaning which also include the question of death and a possible post-existence in disembodied form. Such existential reflections can also offer occasions for spiritual reorientation.

What would be the point of having to deal with symptoms of illness? Only we humans can learn and become more human throughout our lives.

When we experience the limitations and fragility of our physical existence ourselves, new feelings and thoughts are awakened that point us to our imperishable, purely spiritual existence. This existence does not live in the body, but in the powers of our thoughts, feelings, intentions – in the identity that we develop ever more consciously. In this way, something that can be called “spiritual immunity” is created.

Besides these three forms of illness that accompany every course of life, more or less intensively, there is also a group of illnesses that is very difficult to understand. These are unexpected illnesses connected with destiny questions. For example, childhood leukemia, a congenital heart defect, an accident that leaves one physically disabled, food poisoning. Here, “finding meaning” is only possible if we have learned from the “normal illnesses” that accompany life that illnesses do not harm but want to help. They are not a “punishment from God,” but supporters of the individual development of each person. Whoever deals with the questions: Why did this happen to me? What has changed in my life? What could I learn only from this particular experience? will find – if he or she seriously wants to – the meaning, the personal message for his or her path into the future. And when death occurs through illness? Why learn so much when you die suddenly and then perhaps “everything is finished”?⁹ Thoughts such as these lead almost automatically to the realization that human development in one life cannot lead “to perfection” – that although death does indeed end an earthly life, our further development does not end with it.

How should, otherwise, the prophecy contained in *Saint John's Gospel*, for example—“You will know the truth and the truth will set you free” (John, 8:32)—be realized if humans live only once? And, in addition, if people live only either as a man or a woman or something self-determined in between? As soon as we seriously think about the capacity for human development, the thought of reincarnation readily comes to mind. Then the thought is quite relieving, that we can take the achievements of one life on earth with us into a life between death and new birth, and there, in a spiritual form of existence, prepare a next life, where new tasks for further development are pending. Into this other,

non-bodily form of existence, however, we can take with us only what we have become as thinking, feeling, and willing humans.¹⁰ As a result of such a consideration, the feeling of co-responsibility for Planet Earth grows, so that it can offer us the chance for further development for a long time to come.

What Is the "Right Way" to Face the Pandemic?

There are two strategically related approaches to dealing with the Corona pandemic, both recommended by leading epidemiologists: building up so-called herd immunity by more or less controlled—i.e. gradual—immunization of the population, while life goes on as normal, and at the same time protecting risk groups. Many people are familiar with the term herd immunity from the WHO's strategy for measles vaccination. This strategy states that when almost all people are immunized, new infections can occur only in exceptional cases. If, however, to build up herd

immunity in the absence of an available vaccination, as is the case of Corona, one can risk this strategy only if the health service is flexible and has the best staff and equipment to deal with the consequences of this approach. This flexibility is needed because one does not know how many will become seriously ill before immunity is achieved. Great Britain initially tried this approach, but soon failed due to the weaknesses of its chronically underfunded national health care system. At present, only Sweden is consistently taking this approach. In an interview with the magazine *Cicero* on March 26, 2020, Anders Tegnell, a doctor, an epidemiologist, and key advisor to the Swedish government, emphasized:

All countries have the same goal: We are trying to reduce the spread of the virus. [...] But we also agree that it is very difficult to predict what will happen when we close schools. Many things happen when you do that: the children are affected, society, especially the parents. This is where Sweden differs from many other countries: Both parents almost always work here. And many of them work in the health system. And when we speak to them, they say: Do not close the schools. The effect of this measure on public health will be much worse than the spread of the virus in a

9 See Michaela Glöckler, *Raphael and the Mysteries of Illness and Healing*, available at www.buch-engel.com/Gloeckler-Michaela-Hrsg-Raphael, or at the Medical Section at the Goetheanum.

10 See Rudolf Steiner's lectures, *The Inner Nature of Man and Life and Our Life between Death and New Birth*, Forest Row, 2013.

school. [...] We live in a strange world now. Usually we have to fight in the health sector to get things done, for example, vaccination campaigns. Now we have to fight to make sure that things are NOT done. If you ask scientists all over Europe whether it makes sense to close the borders at a time when there are significant number of Corona cases in every country, the answer will be: No. It was the travelers who brought the virus into the country in the beginning, but now not anymore. [...]

Sweden differs from many other countries in one important aspect: on one hand, we have had a very strong bureaucracy here for centuries. A large part of the technical knowledge lies within this bureaucracy. Our ministries, on the other hand, are small and support the politicians in the decisions they make. But politicians in Sweden don't make decisions on details, they just give the general direction in which to march. And the bureaucracy then works out a plan of how to proceed. Politicians make the decisions, but they are based on the knowledge and experience we provide them. [...]

There have been a number of surveys, about our agency and me personally. The result is: We have incredible support.¹¹

In Sweden, therefore, public life is only slightly restricted and the number of infections [at the time of this writing] is currently declining, with many intensive care beds empty.¹² Tegnell suspects that 50% of the population is already infected. However, only a later test could prove this. Latest figures from the press conference with Tegnell on April 16 show that Sweden, with a faster infection rate without a shutdown has 132 Corona deaths per million citizens. In comparison, countries that did enact a shutdown, where infection is slower, had even fewer: Finland 14, Norway 28, Denmark 55, and Germany 46 deaths per 1 million inhabitants.

11 <https://www.cicero.de/aussenpolitik/C-pandemie-schweden-skifahren-staatsepidemiologe-anders-tegnell/plus>

12 [Editor's Note: By mid-October, Sweden (population 10.1 million) has registered the highest number of COVID-19 cases of all the Nordic countries, with 103,200 confirmed cases and 5,910 deaths. Its neighbor Norway (population 5.4 million), which did enact a national lockdown on March 12, 2020, registered 16,136 confirmed cases and 276 deaths.]

To hold a child to an artificial timeline for developmental and academic achievements that apply to all, rather than to the individual child, is to doom a large percentage of children to failure at a very early age.

Leaders in the German *Society for Infectious Diseases* (DGI) consider a strategy that doesn't include a drastic shutdown to be a dangerous mistake. A "controlled infestation" is out of the question for them. They refer to the available figures and the projections derived from them. Board member Prof. Dr. Gerd Fätkenheuer is counting on a strategy for monitoring and controlling the infection. Urgently necessary for this are an expansion of the test capacities as well as the isolation of persons tested positively. To this end, all measures must be taken that can help to control the epidemic. These include smartphone tracking via the COVID-19-app as well as the wearing of face masks if there is a possibility of direct personal contact.¹³

This strategy, which includes the lockdown that paralyzes social life, is now the dominant reality for most countries, because it is guided by the current scientific opinion. This also applies to Germany, even though its health system is in good shape compared to other European countries, and even though leading epidemiologists have spoken out in favor of "controlled infestation" without a lockdown, especially in Germany. The question of the "right approach" can be answered only by the will to find it – and a genuine interest in the well-being of all. Statistics and extrapolations are not enough. Although they offer mathematical security, they can also be blatantly unrealistic. If you want to do justice to life, you need not only numbers but also courage and a sense of reality.¹⁴

Between Panic Scenarios and Trivialization: Where Do We Stand?

Where do we stand? Obviously in the middle of it! Both sides, "panic and neglect" as the WHO puts it, have advanced their arguments, and we can learn from both sides to look more closely at what is at stake. But what can we learn from those who want to see the Corona pandemic integrated into the normal flu season? The question must be asked: What would have happened, if already in January, when the first projections were made, we had concentrated fully on the support of

13 <https://www.dgi-net.de/senioren-vor-COVID-19-schuetzen-junge-infizieren-ein-gefaehrlicher-irrweg/>

14 For example, it has been shown that the contact ban ordered in Germany on March 23 as a result of the calculations of the RKI [Germany's federal agency for disease control and prevention] no longer had any effect on the R-factor, the transmission rate on which the spread of the pandemic depends. Since March 22, it has remained at about 1. See the report of the Robert Koch Institut of April 14, 2020, online at www.rki.de and the report from the influential Tech website *heise online*, at <https://www.heise.de/>.

the health system and had mobilized funds and consultation for it? What if social life had continued undisturbed, and what if we had put our money on quickly building up good herd immunity protection, as the afore-mentioned Swedish chief epidemiologist Anders Tegnell has so far risked?¹⁵ After all, the more people become immune, the slower the epidemic spreads. In addition, voluntary blood donations from people who have already achieved immunity could then be used to provide hyperimmunoglobulin therapy, which can save the lives of severely ill people.

Instead of panic-mongering, a good health care system could elicit public trust by anticipating crises and educating people about measures to strengthen the immune system beyond simply washing hands, protecting one's mouth, and practicing physical distancing. Alternatively, wouldn't it be a nightmare if new waves of influenza and pandemics are used to force people to undergo mass testing and vaccinations "for social reasons" and surveillance measures are tested in the name of public health, while also benefiting the pharmaceutical industry and its associated politics?

Not to mention the danger of people over 65 losing their freedom of movement by decree "in order to be protected by authority," or that residents in old people's homes are no longer allowed to be visited by their relatives?

Good hygiene measures are needed on site in the form of sufficient protective clothing, etc., rather than social isolation. Other news reports speak of the continuous increase of electrosmog—especially from high frequency microwaves, which the 5G installations worldwide are bringing along with them¹⁶—in addition to air pollution, which must be considered the main cause of lung complications. To declare these cofactors to be the main culprits is surely not tenable. But it certainly is relevant to include them in the considerations that are important when it comes to sustainable public health. After all, these are all man-made factors for which there are alternatives, decidedly healthier ones, that could be made widely available, if we only want it so and if we budget a little more time for their development.

15 See Schweden, "Stoisch gegen den Rest der Welt" ["Stoic against the rest of the world"], *Neue Zürcher Zeitung* on Sunday, April 12, 2020.

16 See www.diagnose-funk.org

The decision concerning which system of data transmission—such as the 5G network—is to be chosen is completely beyond the process of democratic control. Systems that have fewer adverse health side-effects in the long term are still under development and are not brought into the decision-making process. But who decided that everything must be done so quickly, even if that means accepting possible damage to health?

One thing is evident from all these considerations: Behind every possible strategy for crisis management stands a certain way of thinking – also about health and illness. These are not mutually exclusive and should complement each other in a meaningful way.

And what about the various conspiracy theories currently circulating? Powers of darkness and of light are always at work around and between us: every good thought is a luminous reality, every dishonest intention a dark one. In the end, it is not "evil people" who rule us, but seductive and evil thoughts. It is our thoughts through which we imagine the visible and invisible world and bring it to consciousness. And it is only through our feelings that we can understand what our thoughts and concepts illumine; we experience feelings that take hold of us and lead us around without our understanding them as burdensome and unhealthy. It is through thoughts that we can bring invisible powers to our consciousness. Religious documents speak

of these – be they gods or devils, angels or demons. We can and must learn to judge which spirit harbors certain intentions, motivations, and deeds.

On many occasions Rudolf Steiner did not shy away from speaking about Lucifer, who is called Diablos in the Bible, and of Ahriman, who is called Satan, in addition to well-known good higher beings, like the archangel Michael and Christ. Goethe has Mephistopheles says

in the drama *Faust*: The little people never feel the devil, even when he has them by the collar. It takes a strong will for self-knowledge to admit to oneself which motive is at the basis of our decision-making for or against something, or how pure the intention is that guides one. Freedom is not available without the risk of erring.

However, if we live with the question—when called upon to judge whether the consequences of certain choices would promote human freedom, and whether

It takes a strong will for self-knowledge to admit to oneself which motivation, which motive is at the basis of our decision-making for or against something, or how pure the intention is that guides you.

we can address the question with our own power of judgment—it becomes easier to recognize whether or not the intentions and goals harbored by such choices truly respect and promote human dignity. Then it will also become clear which spirit is served when we agree to something or not.

Does the Image of the Human Being and the Medical Mindset Need a "Turnabout" in Thinking?

Today's mainstream approach in medicine, informed by empirical natural science, is based on the idea that diseases are errors of nature that can be eliminated to the extent that the mechanism of their development is known. As beneficial as this is to efficiently treating the symptoms of a disease, it seems so naïve—if we know the different levels from which disease-and healing processes can emanate—to think we can control everything physically right through to the final stage of an illness. We should also mention that not only the occasional pathogen but the man-made changes to our habitat and environment and the horrendous contrasts between rich and poor—i.e., those with and those without substantial education—are responsible for most diseases and early deaths.

The Corona crisis shows this with greatest clarity. As sensible as the physically effective emergency measures of isolation and protection may be at first, it would be disastrous if a new type of political-medical form of dictatorship were to emerge using this pattern, which could restrict individual autonomy regarding health to the point of disenfranchisement. The tools for such a change in approach are already available and are currently being successfully tested.

How many elderly people would—with the appropriate education—consider the risk of infection and the possibilities of palliative care as an alternative to intensive care units, in view of the possibility of serious illness? I venture to suggest that many would say with certainty: my personal freedom is more important to me than an ordered security – even if my life ends earlier as a result.

A health care system that does not recognize the meaning and significance of illness and death in a human being's life can neither judge comprehensively nor do justice to the specific questions of those who are

As sensible as the physically effective emergency measures of isolation and protection may be at first, it would be disastrous if a new type of political-medical form of dictatorship were to emerge according to this pattern.

sick. Why should elderly people not have the right to go to a concert, even if they know that they can get infected there during a flu season? It is to be hoped that, in an advanced health care system in the future, directives will also enable people to decide for themselves what kind of protection they would choose, and under which conditions, and bear the consequences.

The image of the human being that also takes the spiritual dimension of humans into account, and their ability to develop towards freedom and dignity must—if medicine is to remain human and become ever more so—needs to complement the natural scientific medicine of

the present, even if this has far-reaching consequences for allopathic medicine, for example in relation to the treatment of the psychosomatic problems mentioned above. Of course, the treatment through painkillers and psychotropic drugs of acute symptoms such as sleep disorders, "nervous heart complaints," stomach pain, appetite problems, restlessness, headaches, depressive moods, anxiety, hatred, and frustration is at first helpful and offers relief. However, if a doctor rules out physical causes for the symptoms, the treatment should not be continued in this way. What can be quite sensible in an acute situation inevitably leads to a dead-end later on.

After all, we humans are not as specialized as animals, which by nature do everything right and "can deal." We must learn everything actively from the very beginning. Even the most human capacities, like walking, speaking, and thinking are not given to us from the start. Even such "natural" things, as sleeping well, eating healthy food, and dealing humanly with reproduction, etc., must be learned during the course of life. The same applies to soul capacities, such as learning to set oneself apart from others, developing healthy self-confidence, self-control, concentration, inner peace, etc. If a medical way of thinking advocates replacing developmental work with medication, it does more harm to the person than good.

But how can the question concerning the kind of thinking in the medical field be helpful to us for the issue of a "shutdown" of social-economic life? The fear that the health system of a country—its ability to provide intensive medical care intervention—is not prepared for an epidemic growth of pneumonia has justified the shutdown. From this point of view, such a temporary

measure is justifiable. The time gained can be used to ensure the supply of protective materials, intensive care beds, and, above all, adequately-trained medical staff. The quality of the country's health care system needs to be scrutinized and the long overdue and requested improvements and investments have to be made. In addition, the slowing down of disease-spreading through "social distancing" serves to make everyone aware of the risk and of social co-responsibility. Good hygiene rules apply to any flu epidemic.

It is therefore crucial that we now reconsider where the "skipping" in the hospitals as a result of privatization has led, not to mention the state of emergency in professions such as nursing and social services, whose staffing shortfalls have been lamented for decades. For this is the result of a materialistic way of thinking that is geared towards maximizing profits. *This* is the problem that brought us the shutdown. If a shutdown is to be avoided in the future, a rethink is needed here. As much as digitalization is now being promoted to compensate for shutdown problems and to better counteract questionable and actual contagions, investments in a healthcare system and good, professional human care will need to be made with similar intensity. Not only that: ecological problems must be diagnosed as the main cause of pandemics and treated globally.

Here are two examples from the aforementioned essay by Thomas Hardtmuth:

The fact that modern poultry fattening has little to do with species-appropriate husbandry need not be stressed. In recent years, mutated virus strains (H5Nx) have suddenly appeared, leading to an increase in mortality rates from avian flu, and it was feared that they could spread to humans and cause a global epidemic. For whatever reason, research results from industry-related institutes have now been published, mainly indicating that this new virus was allegedly imported into Europe from Asian wild birds. As the American evolutionary biologist Robert Wallace (2016) of the University of Minnesota has convincingly demonstrated in his book *Big Farms Make Big Flu*, these new pathogens (Campylobacter, Nipah-virus, Q-fever, hepatitis E, and various novel influenza variants) all originate from industrial

If a medical way of thinking advocates replacing developmental work with medication, it does more harm to the person than good.

agriculture. The mutated strains could not be detected in wild birds.

In 2011, animal breeders in the USA bought 14,000 tons of antibiotics. That is 70-80% of the total annual consumption in the USA, which means that only a quarter of it is used in human medicine. Such consumption figures apply to almost all Western industrial nations. Without this massive use of antibiotics, there would be mass deaths from epidemics in the fattening farms.¹⁷

According to Professor Christine Moissl-Eichinger, Professor of Interactive Microbiome Research at the Medical University of Graz, numerous studies show that pathogenic agents, such as multi-resistant germs in intensive care units, were not eliminated by additional bactericides and antibiotics. Instead, the overall microbial system was modified by adding highly diverse bacterial communities (adding "healthy" bacteria to water solutions) in such a way that the pathogenic germs were neutralized.¹⁸

As long as intensive animal husbandry and large-scale monocultures are considered essential for world food supply, and therefore the largest part of state subsidies goes toward this end, and small farmers receive hardly any help, people will continue to sell their lands to big business. What is needed is a healthy way of thinking about the cycles of life and about how everything in nature, how all development, is connected to every-

thing else. In this context, reading newspaper reports like the one in the [Swiss daily] *Basler Zeitung* of April 16th, under the headline "People Are Starving While the Harvest Rots," is simply unbearable: Millions of tons of *subsidized* agricultural products end up in the garbage because of the closure of restaurants and schools in the USA

and the lack of logistics to get the food to where the need is – the food banks for the needy.

Medicine is diagnosis and therapy in a comprehensive sense. It is not only about fighting viruses with tests, vaccinations, hyperimmunoglobulins, antivirals – it is also about supporting the population in the form of

¹⁷ Thomas Hardtmuth, *Die Rolle der Viren in Evolution und Medizin* [The Role of Viruses in Evolution and Medicine], p. 47.

¹⁸ Hardtmuth, p. 46.

education that promotes resilience and health.¹⁹ Good education, independent thinking and opportunities for further education are also the best means of regulating the growth of the world population in a healthy way in the long term. In addition, there is a need for broad education on why food is dependent on species-appropriate and ecologically sound production, and why, for example, daily meat consumption is more harmful to health than beneficial, etc. All this would be possible if enough people would become enthusiastic about such a “turnabout of thought.”

Anthroposophic Medicine: An Integrative Medical Approach

Anthroposophic medicine was founded by the Austrian philosopher Rudolf Steiner (1861-1925) and the Dutch physician Ita Wegman (1861-1943), in 1920, in Dornach, Switzerland.²⁰ In the year of the Corona pandemic, anthroposophic medicine is celebrating its 100th birthday. It is interesting to note that Steiner's foundation course, consisting of 20 lectures delivered during Easter time of 1920,²¹ not only deals with the then still virulent Spanish flu and sheds critical light on the one-sided model for understanding infectious diseases. He also warned in a public lecture, on April 7, 1920, of the danger that health and hygiene issues would be removed from democratic control and decisions would be made in a strictly authoritarian manner by the prevailing scientific opinion and politics.

The undemocratic nature of this belief in authority contrasts with the longing for democracy (...). Shouldn't it be possible to strive for more democratization than is possible today under the present circumstances in such an area as public health care that concerns every human being so closely, so infinitely closely, and therefore it concerns the whole human community?²²

It goes without saying that Steiner is not concerned with questioning technical authorities and experts. Instead, he is addressing here the way in which a certain concept of hygiene is enforced by state authority, without the people whose health is at stake having a say – and especially in the absence of a natural-scientific model of thinking about the human being and the associated concept of health and illness. Since the very word

Anthroposophy—Greek: *Anthropos*, “human,” and *Sophia*, “wisdom”—means humanness, it is clear that Steiner is concerned with the human right to comprehensive self-determination and self-development and with a community of adults who know that they need each other and that they live for and with each other.

One hundred years later, in the midst of the Corona crisis, these words take on an almost dramatic relevance to the current situation. This relevance is clear when one compares Steiner's concerns and questions with those of Bill Gates, who, on the website of his Bill and Melinda Foundation, claims to uphold the leading view. He advocates comprehensive testing of the world population, global vaccination strategies, and, if necessary, total health monitoring using information technology. He also stresses how government and the private sector must work together to ensure that all this can be implemented efficiently.

Thus, the modern dictatorship of science and economics appears right on the horizon. Faced with such a danger, Steiner emphasizes that the economic sphere must not become “master of the spiritual.” The health of the people should not be served with an economic attitude, but with a “social meaning.” For example, to explain typhoid fever, quite different things from the typhoid bacilli are necessary. After all, questions of hygiene are eminently connected with social status and educational issues. Steiner calls for the health-conscious patient, the “person who has come of age,” to “face the person who says this or that to him as equal: the knowledgeable physician.”²³ For this to happen, however, a foundational school education will be necessary. The sick person should not accept something on authority, but wherever possible out of insight. Steiner's credo was: social issues must be approached with pedagogical means, and pedagogical issues with a school system that is oriented towards the healthy development of children and adolescents rather than performance standards of business and politics. Hence his demand, when Waldorf education was founded in 1919, that there should be a right to education up to the age of 18 and only after that should the preparation for whatever graduation qualification commence—depending on the post-graduation intentions of the young person at that time. Education was for Steiner the most important part of health care provision: preventive medicine.²⁴

In anthroposophic medicine these different levels, from which illness or weakening of the physical constitution can emanate, are described in a differentiated way and

19 See Michaela Glöckler, *School as Environment for Healthy Development*, op. cit.

20 See Michaela Glöckler, *Was ist Anthroposophische Medizin?* [What is Anthroposophic Medicine], op. cit.

21 See, Rudolf Steiner, *Introduction to Anthroposophic Medicine (Spiritual Science and Medicine). First Doctors Course* (Hudson, NY: Anthroposophical Press, 1999), CW 312.

22 Rudolf Steiner, *Hygiene als Soziale Frage* [Hygiene as Social Question], öffentlicher Vortrag, 7. April 1920. In: *Fachwissenschaften und Anthroposophie*, GA 73a, Dornach 2005

23 Steiner, *Hygiene as Social Question*.

24 Ibid.

named as physical, etheric, astral, and ego-organization. These "organizations" present complex interrelationships (Rudolf Steiner also called them "members") of the human being that work together in a regulated way. Here we are dealing with the central expressions of a human being as bodily-physical, as enlivened, ensouled, and spirit-gifted. Decisive here is that the regulated connections and interactions not only constitute the body in its complexity, but that in the course of life, they can also emancipate themselves again from the activity in the bodily constitution through growth and development. They are then available as the soul abilities of thinking, feeling, and willing²⁵ that represent the inner development space of the soul. Such a consideration then also makes it possible to think concretely about the prenatal and postnatal human being. Just as the laws of free-fall work when a body falls, so we can also think this law without any object actually falling. In the same way, the human being can be imagined prenatally as "eternal", i.e. alive in thoughts, feelings, and intentions, and then also again after death, when he has laid down his earthly body and in retrospect beholds his life and his development up to that point.

THINKING	FEELING	WILLING
I- Organization Laws, that bring about Holism and Identity Experience	Astral Organization Laws, that make Conscious Relationships possible	
INTEGRATION	DIFFERENTIATION	
Etheric Organization Laws of rhythmically structured Time-Configurations and Processes	Physical Organization Laws, that fill Space with Matter	
PROLIFERATION, GROWTH, REGENERATION	INTEGRATION OF SUBSTANCE	

Relationship of the human members or organizations to thinking, feeling and willing²⁶

25 See, Rudolf Steiner and Ita Wegmann, *Fundamentals of Therapy* (Spring Valley, NY: Mercury Press, 1999), GA 27.
26 Image taken from Michaela Glöckler, *Schule als Ort gesunder Entwicklung. Erfahrungen und Perspektiven aus der Waldorfpädagogik für die Erziehung im 21. Jahrhundert*, [School as Environment for Healthy Development], (Stuttgart 2020). English translation forthcoming.

This view of the human being does not only make an integrative medicine possible, one that includes the capacities of conventional medicine on the physical level. Rather, it contributes to an even more concretely understandable view of how health can be directly influenced by life-style and by self-education in exercises of soul, spiritual mediation, and religiosity. These connections can be studied in detail, as we learn to experience the spiritual reality of thoughts – including the thoughts of our own 'I' or Self. When we begin to live consciously in our thinking, feeling, and willing as in a non-sensory world, where our being is "eternally" at home, just like our body is in the transitory world, then we stand in life with a different strength than do those to whom the spiritual world is closed.

A spiritual image of the human being such as this one can be experienced as a kind of remedy against the offences of the materialistic worldview, which declares humans to be a chance product of material processes and leaves us uncertain about our inner nature, leading, understandably, to fear and depression. Armed with ridicule and scorn, this worldview considers a continued spiritual life after death as nonsense or a prescientific article of faith. Understandably, those who think like this will have great difficulty developing an ecological and empathetic consciousness.

What Does Anthroposophic Medicine Offer for the Prevention and Treatment of COVID-19?

The anthroposophic hospitals in Berlin (Havelhöhe) and Herdecke and the Filderlinik near Stuttgart are part of a regional care system. Right at the beginning of the crisis, Berlin's Havelhöhe hospital set up a Corona outpatient clinic,²⁷ and all departments expanded their intensive care capacities. In addition to the possibilities of conventional medical treatment, supportive remedies from anthroposophic medicine are also used there to support the self-regulation of the body. In Geneva, at a World Health Organization online meeting on COVID-19, in which the experiences of various complementary medical systems were shared, anthroposophic physicians were able to present the treatment concept for COVID-19 patients, which has so far been coordinated in the clinical context. This revealed interesting parallels with the treatment concept of Traditional Chinese Medicine (TMC), which is still widely used in China.

In the clinic and outpatient practice, fever treatment is of central importance. Just as viruses in the air are sensitive to sunlight and heat, so are they also in the

27 See www.tagesspiegel.de/berlin/neue-Cvrius-ambulanz-in-berlin-spandau-wir-sehen-eine-extreme-verunsicherung-der-bevoelkerung/25622712.html

organism. The body reacts with fever to kill viruses. In addition, a cheerful and bright mood and loving care and support are extremely helpful for the recovery process.²⁸ Therefore, fever-lowering remedies (antipyretics) are only considered if the patient's self-regulation is too weak. Otherwise, the body is well-supported with physical-physiological measures (e.g. leg compresses) in the effort to battle the viruses by increasing body heat and keeping the fever within healthy limits without reducing it unnecessarily.

The anthroposophic pediatrician Prof. David Martin has explained the basic principles of physiological fever treatment on his website and in a video and has done much to allay the fear of fever. He has also given twelve interviews on all questions concerning fever, allergy, and the immune system.²⁹ Sufficient sleep, healthy nutrition, and regular physical exercise and walks in the fresh air are also important. Experiences to date in the anthroposophic treatment of respiratory tract infections are documented in detail in the *Vademecum*.³⁰

On the soul-level it is positive feelings that help staying healthy. Everyone knows from his or her own experience that feelings have a very strong influence on how deeply or superficially we breathe, how regularly and relaxed or tense and stagnant our breathing can be.

Since the respiratory tract can be particularly affected by COVID-19 infections, up to the most severe life-threatening pneumonia, it is particularly important to be aware of this connection. But how can you create positive feelings when you are afraid of infection or when you have stress and anger in the cramped settings of your home? How can you heal if you are worried about sick people or old family members that you can only contact via telephone and cannot visit?

There are several options: In the first place, I'm sure you all love music. By listening to music, getting involved with it, one can experience directly how the mood of

the soul and the emotional state and breathing behavior change. In addition, the contemplation of certain moments in life, when you were grateful, satisfied, and happy, can bring clearly before you the understanding that, although you are now living through a crisis, other times will surely come. There are also prayers and meditative verses that one can take up. Here, for example, is one by Rudolf Steiner, aimed to help restore inner peace:

I carry peace within me,
I carry within myself
The forces that strengthen me.
I will fill myself
With these forces of warmth,
I will inculcate myself
With the power of my will.
And I will feel
How peace streams
Through all my being
When I strengthen myself,
To find within me
Peace as strength
Through the power of my striving.

In the interpersonal relationships it is very helpful to listen more consciously to what the other person wants to say, and, instead of reacting immediately, to consider for a moment how to formulate the answer in such a way that it can be well-received.

The salutogenesis researcher Aaron Antonovsky (1923-1994) discovered three qualities of feeling that can make a person internally secure and resistant (or resilient).³¹ If we practice these in interpersonal dialogue at home and at work (when this is possible again), we can help ourselves and others to breathe more freely

and feel healthier. These are the feelings we have when we understand something, when we experience something as meaningful, and when we feel the joy of knowing how to do something.

This threefold "sense of coherence," the threefold sense of coherence of *comprehensibility, meaningfulness, and manageability*, plays the central role in the interpersonal sphere. To feel that you are understood is good; so is the experience of meaning in your thoughts and actions; and the experience of doing, that you can and have the ability to help – brings joy. Much of this can be experienced in both a positive and negative sense

Education was for Steiner the most important part of health care provision: preventive medicine.

28 See www.tagesspiegel.de/berlin/neue-Cvirus-ambulanz-in-berlin-spandau-wir-sehen-eine-extreme-verunsicherung-der-bevoelkerung/25622712.html

29 see www.warmuptofever.org, www.youtube.com/watch?v=iVURD9lmtcU and <https://medsektion-goetheanum.org/anthroposophische-medizin/care-praxis-anthroposophische-medizin/umgang-mit-fieber-und-infektionserkrankungen-care-ii/>.

30 *Vademecum Anthroposophische Arzneimittel*, Supplement Der Merkurstab 70, Berlin 2017. For self treatment at home in milder cases of infection I can recommend the publication from Markus Sommer, *Grippe und Erkältungskrankheiten natürlich heilen* [Natural Healing of Influenzas and Common Colds] (Stuttgart 2009).

31 Aaron Antonovsky, *Salutogenese – Zur Entmystifizierung der Gesundheit* [Salutogenesis: Demystifying Health] (Tübingen 1997).

but can also be practiced with a lot of humor, especially now that so much has to take place in the confined spaces at home. For nothing is more hurtful than not to be understood, to experience oneself as meaningless and powerless. We must remember, it is through feelings that we experience ourselves as connected to the world. Context or relationship, however, is the law of all living beings – none could survive without relation to the environment. On the other hand, falling out of relationship, out of context, isolation – are hostile to life and harmful; if they last too long, they can be fatal.

On a spiritual level, good thoughts and motivations have an immune-stimulating effect. They aim at what is essential and they make us feel that we are constituted not simply of a physical body but that we also have a spiritual, indestructible identity that is accessible to thought. Who doesn't know the power of getting excited about something or when we focus on an ideal and are committed to realizing it? Good thoughts connect human beings spiritually; they can strengthen us spiritually. It is striking, how strongly people who are ill experience the good thoughts that others send them.

From where does this "power of thought" come? Even a simple consideration makes this clear: In the end, it is always thoughts, laws, that determine life and our environment – including the technical instruments we create. The lawfulness or regularity that we experience is effective, but this lawfulness is based on a thought. Thoughts are, so to speak, powerful laws. In self-education this is a daily experience: I develop myself in the direction that I have thoughtfully planned: first I think, then I realize it through practice. If, for example, we practice honesty in our daily lives, at some point we will become truly honest people. Similarly with belief and trust: I can only believe in something, trust in something that I can think – even if at first I do not entirely understand it. In Greek, belief and trust are expressed by the same word: *pistis*. But trust is the basic feeling we have in our thinking. The two belong together because we trust our thinking unconditionally. This is why doubts—these, too, are thoughts—can torment us so much. If we would not believe in them, they would not have this power over us.

This is why words and thoughts like those of the Protestant theologian Dietrich Bonhoeffer, in a prayer that he had written in prison a few months before his execution, have had such a strong effect that they soon became part of every large prayer collection. A verse from it may remind us of this:

*Wonderfully sheltered by good powers
We wait and trust in what may come
God is with us in the evening and the morning
And most certainly, on each new day.*

Thoughts and words such as these have an immediate healing and ego-strengthening effect, because thoughts not only dominate the material world as laws of nature but also form the bridge to the invisible divine-spiritual world. Whoever learns to make himself at home there also with his thoughts, identifying with goals and ideals that originate in that world, has an inexhaustible source of health opened up for himself.

It is the immune system that ultimately secures our physical being, but it is strengthened and influenced by the acquired soul-spiritual immunity that comes from identifying with what inspires us and gives meaning to our lives. Goethe expressed this experience of eternity and indestructibility of thought in his poem "Legacy":

*No Being can disintegrate to nothing!
What is Eternal stirs in all of us!
To Being, hold on happily!
For Being is eternal; 'tis laws that will
Maintain the living treasures
From which the universe adorns itself.*

Rudolf Steiner once formulated for a student these eternal values and ideals so:

*To wonder at beauty,
Stand guard over truth,
Look up to the noble,
Resolve on the good;
This leads us all truly
To purpose in living:
To right in our doing,
To peace in our feeling,
To light in our thinking,
And teaches us trust
In a guidance divine
Of all that there is
In the breadth of the world,
In the depth of the soul.*

Anthroposophic medicine sees itself as integrative medicine that adapts its therapeutic approaches to individual circumstances at all levels of human existence.

What Is Important for Children in This Crisis?

The good news is that, according to the experience gained so far, by and large children and adolescents do not become seriously ill, but rather experience the

virus as harmless with mild symptoms or in some cases not at all. Prof. Christian Drosten also noted on April 16, in a German radio podcast, that apparently only a few people become infected in households. Perhaps there is some yet unnoticed background immunity gained through cold-related Corona viruses.

In his commentary in the Stuttgart newspaper of April 17, 2020, "The Burden of Families: Politics Must Give Parents and Children More Support in the Crisis," Dieter Fuchs sums up the problems at home:

11.4 million families with underage children are forced to organize their work, learning, childcare somehow, in far reaching isolation from other people who could help. Especially for families with small children this is hardly feasible in the long run. Psychological and economic problems are the result – hardships that politicians have not yet given the necessary attention to. This should change. (...) Individual solutions are needed, possibly organized by the youth welfare services. Otherwise, educationally disadvantaged and poor families could fall through the cracks. And it is the children who are burdened the most by this. A Corona generation is impending. (...) Their basic rights to education, freedom of movement, and social exchange are ignored. A society that burdens parents and children for months will pay a heavy price.

As true as these words are, it is also true that much is mobilized locally by responsible parties in day care centers, kindergartens, and schools, offering bridging services as well as online and telephone advice, and showing solidarity during the forced closures. One teacher, for example, visited all her students at home and discussed daily activities and tasks with their parents via email and Dropbox. Another teacher is in constant correspondence with many children. The reason for this is clear: What do children need most of all in crisis situations? What is the most important thing? Human commitment, presence, and closeness.

The presence of at least one adult can make a child feel that the world is in order despite all the commotion around Corona. Even in times of war, children feel protected when adults around them radiate peace and confidence through their inner confidence, their trust

in life and the future. This is much easier to do for the sake of children with their presence than without it. Playing games together, reading, talking, singing, painting, engaging in handcraft – all these are helpful ways to intensify the connection. Everything that deepens the immediate human relationship and makes closeness tangible is spiritual nourishment, which in such times is at least as important as good food on the table.

What else can be done at home and in one's immediate surroundings? Whenever possible, involve the children in domestic activities: cooking, cleaning, tidying up. If the adults enjoy performing activities of this kind, children will feel attracted and will want to participate.

When going for walks, look around with the eyes of a child, discover, enjoy the beautiful weather, the flowers, the clouds, the wind.

Most importantly, one of the side effects of the Corona crisis is the enormous boost in importance that digitalization has gained. Social isolation is shifting communication to electronic media, border closures and travel bans suggesting that people should meet virtually via *Zoom* or *Skype* instead. Schools offer e-learning, while digital media have already taken their place at the center of home life. Consequently, the daily struggle to limit screen time becomes even more tedious, and the struggle is easily abandoned. At this point, it must be said all the more clearly that there is nothing that undermines and impairs the healthy brain development of children and young people more than too much screen time during the years of physical development. This is especially the case in the first three years of life, when the brain develops fastest. The golden rule here is: Under three – screen free!

The media guide book, *Growing up Healthy in a World of Digital Media*, which was originally compiled and published by the Alliance for Human Education, is strongly recommended in this context.³² Not only does it provide the necessary scientific basis for understanding neurobiological connections on the basis of independent research, but it also explains the increased sensitivity of young people's brains to electro-smog. In addition, it instructs how children can be protected from cyberbullying and other negative influences stemming from the internet and from social networks.

32 Michaela Glöckler and Richard Brinton, *Growing up Healthy in a World of Digital Media: A Guide for Parents and Caregivers of Children and Adolescents* [Hudson, NY: Waldorf Publications, 2019].

What is particularly important here are the positive indications as to what can be put in place of screen-time to provide children and adolescents with age-appropriate educational and developmental stimuli. The human brain needs about 16 years for the control centers in the frontal brain to become mature enough to enable independent thinking, a sense of responsibility, and the capacity for an autonomous conscience.

What, then, is the best way to promote brain development? Whole-body activity.

Just as brain-damaged infants are treated with gymnastics, using certain movement patterns to provide damaged areas of the brain with direct incentives for regeneration and support from non-damaged areas, so, interestingly, the recommendations for treating dementia prophylaxis go in the same direction. The recommendation here is not crossword puzzles and mental arithmetic but physical exercises in dexterity, coordination, and movement. Therefore, artistic activities such as painting, sculpting, singing, making music, puppetry, as well as classical school activities such as learning to write by hand are recommended as complex, whole-body activities that promote brain development most effectively. Tapping and swiping the touchscreen, on the other hand, does not. When facing the screen, the body's own activity and complex sensory integration work are largely eliminated.

Even the act of looking at a screen is exactly the opposite to the activity of a healthy eye. When engaged in looking at one's surroundings, the eye muscles are active and move to perceive what one wants to look at. In front of the screen, however, the image moves and the eye muscles remain rigid and inactive. This is not such a big problem for adults with trained brain structures who can sit in front of a screen for any length of time, for either professional or personal reasons; it does, however, present a permanent false stimulation for children and adolescents as their organs mature.

What are the consequences? People get used to responding to a presented scheme. Imagination, empathy, and independent thinking are inhibited in their development. This is why Waldorf education applies the principle of promoting students' own initiative

and creativity instead of consuming the product of someone else's; learning actively and practicing things by oneself before delegating them to the computer – this promotes the human core competences. The Waldorf curriculum for media education drawn up by Prof. Edwin Hübner is recommended for teachers, as it offers a wealth of ideas for working creatively towards the necessary media competence and media literacy.³³ Also worthy of mention is the initiative of the ELIANT Alliance, which together with the Alliance for Humane Education is campaigning for the right to screen-free kindergartens and primary schools.³⁴

What Is This Crisis Doing to Us?

In the report of the Ethics Council of the [German] Federal Government (*Bundesregierung*) by Prof. Peter Dabrock and Prof. Steffen Augsberg, we read among other things:

For a body whose statutory task is to advise the Bundestag and the Federal Government, but also to stimulate public discourse, the continuation of a thoroughly controversial debate is, of course, no cause for concern. Debate can and should be welcomed by everyone, including the politicians, as an expression of the open society. For: If people already show an admirable degree of solidarity and accept sometimes very drastic restrictions of freedom without complaint, then we should not deny them their rights to reflect on the unprecedented challenges of the present, even to complain about them, to point out what burdens they experience in themselves and in others, or to question whether the measures taken are proportionate. Against this background, it is not only legitimate, but also necessary to consider

how to proceed and under what conditions opening perspectives are justifiable, perhaps even necessary. "The Corona crisis is the hour of democratically legitimized politics." With

Steiner's credo was: social issues must be approached with pedagogical means, and pedagogical issues with a school system that is oriented towards the healthy development of children and adolescents rather than towards performance standards of business and politics.

33 www.waldorfschule.de/fileadmin/bilder/Allgemeines/BdFW_Medienpaed_an_WS.pdf. In this connection, I would also like to draw attention to the initiative „echt dabei“ ("truly present") and their excellent website: www.echtdabei.de. They also give helpful suggestions as to what can be done instead of spending time in front of a screen.

34 www.eliant.eu.

this sentence we close our statement – meant as an invitation and a request that the determination of the acting policy is strengthened if it seeks to resonate with the public. The citizens who are the public must, for their part, be asked to be patient, because we obviously still have the peak of the crisis ahead of us. It is too early to carry out openings [of public spaces] now. But it is never too early to think about criteria for openings. Anything else would be an authoritarian state thinking that should not be entangled in our system and that would not strengthen the trust of the people, which is so necessary.

(...) We must move away from an all-or-nothing thinking and doing. The longer the crisis lasts, the more voices should be allowed, yes, must be heard. We should not be afraid to let many people with different competences but also legitimate interests have their say.³⁵

One such courageous voice is that of the Hamburg pathologist Prof. Klaus Püschel, head of the forensic medicine institute at the University Medical Center Hamburg-Eppendorf. On April 2, he told the *Hamburger Abendblatt* newspaper about the postmortem examinations he conducted of people who had died with a diagnosis of COVID-19. He had not seen a single case that was not also burdened by serious pre-existing conditions. He therefore severely criticized the Robert Koch Institute for not recommending the autopsy of so-called Corona deaths out of hygienic reasons and the suspected danger of infection. One has to learn from the dead for the sake of the living. According to his assessment, the cause of death would often turn out to be typical old-age Coronary events that occur in every flu season. Even in the few known individual cases of those who died at a younger age, one would have had to investigate the specific cause of death.

When I read this, I thought of Rudolf Steiner's call for a democratization of the health system – there is no better way to reiterate this call in the current crisis. And to counter the fear of the digital surveillance state that is now being tested everywhere, I would like to quote Joseph Weizenbaum, professor at the Massachusetts Institute of Technology. He was one of the most influential and innovative co-developers of computer technology in the US during the 20th century. In an interview

What do children need most of all in crisis situations?

What is the most important thing? *Human commitment, presence, and closeness.*

in the Orwellian Year, 1984, when asked whether the total surveillance state was coming, he said: "Of course, that's what we're working towards. But when it really comes, this state, it is much more a consequence of the fact that people no longer defend their freedom than that the computer is to blame for it."³⁶

Weizenbaum then cited the Stalin and Hitler regimes as examples of how total surveillance is possible without computers and how much a prosperous future for humanity depends on the development of morality and humanity. This, however, is the most important challenge for the educational system of the future. Anyone who thinks that

digitalization will provide the decisive support for the task of moral development will surely be disappointed. Morality cannot be taught – any more than value-awareness – and most certainly not digitally! Nor can it be downloaded via an app. It can be cultivated only through specific interaction with people. This requires real people who can set an example and live and work together with children and young people in a committed manner.³⁷

All of this can give us courage to see how much positivity and caring has been and continues to be created during the Corona crisis, next to all the anxiety and concern. Many people are now saying and writing about rediscovering what is really important and what brings true joy. To many, it has become clearer—suddenly it seems self-evident—that what really matters is real human relationships, which should be further worked on and developed, to make them even more "human." But it is also to be hoped that in the context of coming to terms with this crisis—especially economically, socially, and with regard to the health care system—a different thinking than the one that prevailed before the crisis will be guiding the way forward.

For the moment, though, we are still in the middle of it all; we are still experiencing how much our well-being depends on the way we think about ourselves and about the situation.

36 Joseph Weizenbaum, *Kurs auf den Eisberg. Die Verantwortung des Einzelnen und die Diktatur der Technik* [Heading for the Iceberg: The Responsibility of the Individual and the Dictatorship of Technology] (München 1987), p. 104.

37 See the Petition of the European Alliance ELIANT and the "Bündnis für humane Bildung" at www.elianteu.eu.

35 www.ethikrat.org/fileadmin/PDF-Dateien/Pressekonferenzen/pk-2020-04-07-dabrock-augsberg.pdf

How Will Things Be After Corona?

Albert Einstein once famously remarked, "The purest form of madness is to leave everything as it is and at the same time hope that something will change."

For many years now a growing number of people has felt that a fundamental cultural change is needed, for instance in the way we do business: When will the limits to growth on our limited planet be taken seriously? At some point in time, even the last virgin forest will have been cleared, the largest areas of land will have been permanently damaged by over-fertilization and even become infertile, and the climate crisis will be unstoppable.

To be sure, our kitchen appliances can communicate with each other in a smart home, *Alexa* and similar electronic helpers join in the routine housework and communicate with providers on the internet. You don't have to unlock the front door yourself anymore; your favorite music plays when you enter home; you can arrange everything on your own and your own home becomes a world in which all information is always available. At the same time, unemployment figures have risen further, and mass misery arising in war and crisis regions has increased. Even if a "*bedingungslose Grundeinkommen*" or unconditional basic income were to be established—the money is available, it would only need to be redistributed a little—it would merely ensure sufficient consumption competence to keep the economy running. But if the way of thinking and doing business does not change fundamentally, the very conditions that brought us into this crisis would continue.

Great books have appeared since the groundbreaking publications of Rachel Carson's *Silent Spring* and the Club of Rome's *The Limits of Growth*. And we should also mention Rudolf Steiner's suggestions, which he made after the First World War:

- For an economic life: that it is structured associatively, with all those involved in the value-creating chain, right up to the sales, sitting together with the consumers and talking about sustainable production, adequate working conditions, and acceptable prices in such a way that something satisfactory results for all concerned. That certainly means more quality and less consumption. It replaces the ideology of growth with an ecology-oriented thinking about circular flow

and interrelationships that do justice to the life of humans, nature, and earth, also in the long term.

- For an independent free cultural life of schools, educational institutions, universities, artistic activities: that they can develop independently of state educational plans with financing not tied to any strings, since freedom and self-determination are the most important educational goals.
- For a legal life of human rights and politics: that they create laws and framework conditions so that economic and cultural life can harmonize with social life.³⁸

How good it is, that Ernst Ulrich von Weizsäcker and Anders Wijkman wrote the book, *Wir sind dran* ("It Is Our Turn").³⁹ This volume was written together with 33 other members of the Club of Rome for its 50th anniversary in 2018. If only a fraction of those responsible for the state and the economy would read such a book and take it seriously, humankind would have the best chances! For what does the current crisis teach us? What does virus research teach us? How everything is connected to everything else! How we humans are part of the ecosystem and how our life is part of the life on our planet.

We need to work on an integrative understanding of humans and society that also includes the spiritual side of existence. We also need a secular spirituality which is based on thinking as a bridge between the world of

the senses and the spiritual world and from there makes its contribution to the cultural development of humanity. Anthroposophy, with its holistic cultural initiatives, can contribute to this not only in the already relatively well-known fields of medicine, education, and agriculture, but also increasingly in the social and economic field, as has been shown by pioneers such as the founder of the dm drugstore chain, Götz Werner, or the recipient of

the alternative Nobel Prize, Ibrahim Abuleish, for his SEKEM-cultural initiative in Egypt.

What does the crisis teach us?
What does virus research teach us?
How everything is connected to everything else!

³⁸ Rudolf Steiner, *Towards Social Renewal: Rethinking the Basis of Society* (London, UK: Rudolf Steiner Press, 1999), CW 23.

³⁹ *Wir sind dran. Club of Rome: Der große Bericht: Was wir ändern müssen, wenn wir bleiben wollen* [It Is Our Turn: What We Need to Change, If We Want to Stay] (München 2019).

Michaela Glöckler, M.D., served as the Head of the Medical Section at the Goetheanum, School of Spiritual Science, in Dornach, from 1988 to 2016. Since 1988, she has been holding the position of President of Management Board at the European Alliance of Initiatives for Applied Anthroposophy/ELIANT, an organization devoted to improving quality of life and cultural diversity in Europe. Dr. Glöckler attended the Waldorf School in Stuttgart before studying German language, literature, and history in Freiburg and Heidelberg. She studied medicine in Tübingen and Marburg and trained as a pediatrician. She is the author of many publications including *A Healing Education: How Can Waldorf Education Meet the Needs of Children?*, *A Guide to Child's Health*, and *Growing up Healthy in a World of Digital Media*.



Report from the Online Waldorf Library

Marianne Alsop
OWL site Administrator

The Online Waldorf Library continues to be a positive and effective resource for those interested in Waldorf Education in countries all over the world. With the outbreak of COVID-19, and with many school communities experiencing self-isolation, the OWL has become a sought-after resource for Waldorf elementary and high school home school curriculum. Please do not hesitate to contact us through the “Contact Us” page with your questions.

From January 2020 to September 2020 we have seen close to 180,000 site visitors from many English-speaking countries as well as from Mexico, India, Argentina, Chile, Spain, Peru, and Colombia!

We are fortunate to be able to offer an ever-expanding number of eBooks, available in pdf format, which can be accessed by downloading free software from Adobe Reader.

eBooks added in English since the Spring of 2020, include:

- *Tell me a Story*, Edited by Louise deForest, from WECAN
- *The Singing: Playing Kindergarten* by Daniel Udo de Haes, from WECAN
- *The Seven Life Processes* by Philipp Gelitz and Almuth Strehlow, from WECAN
- *School Readiness Today*, Edited in English by Nancy Blanning, from WECAN
- *A Lifetime of Joy* by Bronja Zahlingen, from WECAN
Let's Dance and Sing by Freya Jaffke, from WECAN
Who was Rudolf Steiner by Frederick Amrine

The following books from the Foundations of Education Series have all been updated by Frederick Amrine:

- *The Spirit of the Waldorf School*
- *Soul Economy*
- *Waldorf Education and Anthroposophy*
- *Education of the Child*
- *The Kingdom of Childhood*
- *The Genius of Language*
- *Human Values in Education*
- *The Spirit of the Waldorf School*
- *Education As A Force for Social Change*
- *The Foundations of Human Experience*
- *The Modern Art of Education*
- *Rudolf Steiner in The Waldorf School*

New articles in Spanish and English are posted every month and can be accessed from the Home page by clicking on *Artículos en Espanol* and *Articles*.

As always, back issues of the *Research Bulletin*, *Gateways* (Waldorf Early Childhood Association), *Pedagogical Section/Rundbrief* and a number of other international publications are available online in our *Journals* section. The Online Waldorf Library welcomes your questions and we are happy to help with you with your research projects.

**Visit the Online Waldorf Library at
www.waldorflibrary.org**

Report from the Research Institute for Waldorf Education and Waldorf Publications



Patrice Maynard

Director of Publications and Development

During these last few months, the Research Institute for Waldorf Education (RIWE), including its Online Waldorf Library (OWL) and Waldorf Publications (WP), has felt the widening human and social consequences of the Coronavirus pandemic. In addition to the strange and remarkable COVID-19 restrictions and yoyo openings and closures, the Board of RIWE, on recommendation of its finance committee and New Hampshire accounting firm, closed its operational office in Wilton, New Hampshire. All of our work is now focused in Hudson, New York, at the office of Waldorf Publications, as of August 1, the start of our fiscal year. This consolidation will reduce redundancies and unite the bookkeeping for RIWE/Waldorf Publications.

The sad part of this story is the ending of Milan Daler's tenure as RIWE's administrator. He has been with RIWE since Douglas Gerwin and David Mitchell became co-directors of the Institute in 2004. Milan has seen RIWE through many years and many adventures – carting *Research Bulletins* across state boundaries to safe storage, helping the transfer of publications from AWSNA to RIWE in 2013 after David Mitchell's passing during the previous year, juggling many administrative hats with characteristic gentlemanly style. At this year's annual trustee meeting, Arthur Zajonc, outgoing president of the board, spoke eloquently of Milan's contribution as an anchor to the operations of RIWE over these past sixteen years.

Arthur's words of appreciation coincided with his own departure from the Research Institute board for reasons of health. During his nine-year tenure as board president, Arthur was an insightful navigator of the Institute. His background as a physicist, university professor, Anthroposophist, reader for the First Class of the School for Spiritual Science, General Secretary of the Anthroposophical Society in America, Executive Director of the Mind and Life Institute, and consummate teacher made him a steady and knowledgeable helmsman of RIWE over his thirteen years as trustee. Arthur was in the habit of testing boundaries and exploring similarities and differences in worldviews of different kinds. His keen and nuanced thinking helped all at RIWE to do the same in exploring problems and insights from a variety of directions.

As RIWE's Vice President, Elan Leibner, Chair of the Pedagogical Section Council of North America, agreed to step in *pro tempore* while a new president was sought. Ginnie Flynn, longtime board member both at RIWE and at AWSNA, has now agreed to assume the role of board president. Ginnie's presidential contributions will bring fresh and knowledgeable vision. As class teacher at the Rudolf Steiner School of Great Barrington, AWSNA regional chair and board member, advocate for Waldorf schools in Mexico, mentor to schools and teachers, mother of a Waldorf teacher and a musician, grandmother, and dear friend to uncountable numbers across the Waldorf movement, Ginnie brings a wealth of experience, intelligence, and heart forces to this position. All on the board of RIWE are in her debt for her willingness to step into this new role for the Institute.

At RIWE, OWL, and Waldorf Publications we remain grateful to be able to continue our work on behalf of Waldorf schools, Waldorf teachers, Waldorf communities, and our troubled world despite the turbulence wrought by this pandemic. We watch with admiration as AWSNA and schools across North America work to navigate the strange and disturbing vicissitudes of the pandemic, along with government officials attempting to manage the situation and the political noise that complicates it.

We experience the heart-rending news of schools forced to close their doors, some after many years of robust service, in light of these disruptive times. We wish for hearts to remain strong and confident in knowledge of the future. The children who have been entrusted to the care of these teachers and schools promise a warmer, kinder, more graceful future for the earth. All service to them and to Anthroposophy is significant and makes a difference! Here's to the reaping of benefits from this time so that we can create a brighter future with new discoveries and new insights arising from the consciousness raised by these circumstances.

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About the Research Institute for Waldorf Education

The Research Institute for Waldorf Education (RIWE), founded in 1996 in order to deepen and enhance the quality of Waldorf education, engages in sustained dialogue with the wider educational-cultural community and supports research to serve a wide range of educators in their work with children and adolescents.

The Research Institute supports projects dealing with essential contemporary educational issues such as computers and the effects of media on children, alternatives to standardized testing, physical health and psychological well-being of students, science teaching with a phenomenological approach, the role of the arts in education, and the philosophical underpinnings of Waldorf education.

As a sponsor of colloquia and conferences, the Research Institute brings together educators, psychologists, physicians, and social scientists for discussions on current issues related to education. RIWE publishes a *Research*

Bulletin twice a year and prepares educational resources, including collections of eBooks and articles (a growing number of them newly translated into Spanish). Many of these publications are available without charge on the website of the Online Waldorf Library (OWL), a virtual library created and managed by the Research Institute: www.waldorflibrary.org.

In 2013 the Research Institute took over the publications arm of the Association of Waldorf Schools of North America (AWSNA) and re-branded it as Waldorf Publications. It includes resources for teachers and administrators, readers and children's books, collections of plays and poetry, science materials and kits, science and math newsletters, inspirational essays, proceedings of colloquia, and a range of publicity materials about Waldorf education. It also carries books published by the Waldorf Early Childhood Association of North America (WECAN) and the Pedagogical Section Council (PSC) of the School for Spiritual Science, as well as AWSNA's twice-yearly magazine *Renewal*.

Summary of Activities Supported by the Research Institute

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A think tank for questions of freedom in education
Heartsspeak.net website of stories from the classroom

SUBJECT-SPECIFIC COLLOQUIA

On Teaching (with published proceedings):
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Physical Sciences
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Handbook of Waldorf Pedagogy
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theresearchbulletin@gmail.com

David Mitchell, Cover design

Alice Brown, Proofreading

Maris Van de Roer, Layout/
Production

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AL: Alabama Waldorf School **AK:** Anchorage Waldorf School **AZ:** Tucson Waldorf School **CA:** Bay Area Center for Waldorf Teacher Training · Berkeley Rose Waldorf School · Camellia Waldorf School · Cedar Springs Waldorf School · Davis Waldorf School · East Bay Waldorf School · Highland Hall Waldorf School · Live Oak Waldorf School · Maple Village Waldorf School · Marin Waldorf School · Pasadena Waldorf School · Sacramento Waldorf School · San Francisco Waldorf School · Sanderling Waldorf School · Santa Cruz Waldorf School · Sierra Waldorf School · Summerfield Waldorf School & Farm · Valley Waldorf City School · Waldorf Institute of Southern California · Waldorf School of Mendocino County · Waldorf School of Orange County · Waldorf School of San Diego · Waldorf School of Santa Barbara · Waldorf School of the Peninsula · Westside Waldorf School **CO:** Boulder Valley Waldorf School · Denver Waldorf School · Shining Mountain Waldorf School · Tara Performing Arts High School · Waldorf School on the Roaring Fork **CT:** Housatonic Valley Waldorf School **FL:** Heart Pine School · Sea Star School · Suncoast Waldorf School **GA:** Academe of the Oaks · Waldorf School of Atlanta **HI:** Haleakala Waldorf School · Honolulu Waldorf School · Malamalama Waldorf School **ID:** Sandpoint Waldorf School **IL:** Arcturus Rudolf Steiner Education Program · Chicago Waldorf School · Da Vinci Waldorf School · Four Winds Waldorf School · Urban Prairie Waldorf School **KS:** Prairie Moon Waldorf School **KY:** Waldorf School of Louisville **LA:** Waldorf School of New Orleans **MA:** Ashwood Waldorf School · The Bay School · Maine Coast Waldorf School · Seacoast Waldorf School **MD:** Waldorf School of Baltimore · Washington Waldorf School **MA:** Berkshire Waldorf High School · Great Barrington Rudolf Steiner School · Hartsbrook School · Waldorf High School of Massachusetts Bay · Waldorf School of Cape Cod · The Waldorf School of Lexington · Waldorf School at Moraine Farm **MI:** Detroit Waldorf School · Rudolf Steiner School of Ann Arbor **MN:** City of Lakes Waldorf School · Minnesota Waldorf School **MO:** The Waldorf School of St. Louis **NV:** Nevada Sage Waldorf School **NH:** Center for Anthroposophy · High Mowing School · Monadnock Waldorf School · White Mountain Waldorf School **NJ:** Waldorf School of Princeton **NM:** Santa Fe Waldorf School **NY:** Alkion Center · Aurora Waldorf School · Brooklyn Waldorf School · Green Meadow Waldorf School · Hawthorne Valley School · Ithaca Waldorf School · Lakeside School at Black Kettle Farm · Mountain Laurel Waldorf School · The Otto Specht School · Primrose Hill School · Rudolf Steiner School of New York City · Sunbridge Institute · Waldorf School of Garden City · Waldorf School of Saratoga Springs **NC:** Emerson Waldorf School **OH:** Cincinnati Waldorf School · Spring Garden Waldorf School **OR:** Cedarwood Waldorf School · Corvallis Waldorf School · Eugene Waldorf School · Portland Waldorf School · Shining Star Waldorf School · The Siskiyou School · Swallowtail Waldorf School and Farm · Waldorf School of Bend · Waldorf Teacher Education Eugene **PA:** Camphill Special School · Kimberton Waldorf School · River Valley Waldorf School · Susquehanna Waldorf School · Waldorf School of Philadelphia · Waldorf School of Pittsburgh **PR:** Escuela Micael **RI:** Meadowbrook Waldorf School **SD:** Lakota Waldorf School **TN:** Linden Waldorf School **TX:** Austin Waldorf School **VT:** Lake Champlain Waldorf School · Orchard Valley Waldorf School · Upper Valley Waldorf School **VA:** Charlottesville Waldorf School · Potomac Crescent Waldorf School · Richmond Waldorf School **WA:** Bright Water School · Madrona School · Olympia Waldorf School · Seattle Waldorf School · Sound Circle Center · Sunfield Waldorf School & Biodynamic Farm · Tacoma Waldorf School · Whatcom Hills Waldorf School · Whidbey Island Waldorf School **WI:** Great Lakes Waldorf Institute · The Madison Waldorf School · Pleasant Ridge Waldorf School · Prairie Hill Waldorf School · Tamarack Waldorf School · Youth Initiative High School ·

Canada

ALBERTA: Calgary Waldorf School · Waldorf Independent School of Edmonton **BRITISH COLUMBIA:** Cedar Bridge School · Kelowna Waldorf School · Nelson Waldorf School · Saltwater School · Squamish Waldorf School · Sunrise Waldorf School · Vancouver Waldorf School · West Coast Institute for Studies in Anthroposophy · Whistler Waldorf School **NOVA SCOTIA:** South Shore Waldorf School **ONTARIO:** Halton Waldorf School · London Waldorf School · Mulberry Waldorf School · Rudolf Steiner Centre Toronto · Toronto Waldorf School · Trillium Waldorf School · Waldorf Academy **QUÉBEC:** École Imagine · École Rudolf Steiner de Montréal · Institut Rudolf Steiner au Québec ·

México

AGUA SCALIENTES: Colegio Waldorf Amanecer **GUANAJUATO:** Colegio Yecan Waldorf **JALISCO:** Waldorf de Guadalajara **MORELOS:** Centro de Desarrollo Antroposofico · Escuela Waldorf de Cuernavaca **OAXACA:** Papalotes Oaxaca · Papalotes Puerto Escondido **PUEBLA:** Escuela Raíces Iniciativa Waldorf Puebla **QUERÉTARO:** Escuela Libre Lila K'erendarhu **QUINTANA ROO:** Ak Lu'um Waldorf School · Del Mar Waldorf Initiative Cancun · Ximbal · Iniciativa Waldorf Cancun **STATE of MÉXICO:** Colegio Inlakesh ·

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