EDITORIAL

Educational dinosaurs in the digital-pandemic era: the need for a digital framework and an emergency framework in education

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About 65 million years ago, dinosaurs went extinct. A tragic, unforeseen event completely changed the course of evolution. Or rather, some argue that this event accelerated evolution considerably.

Dinosaurs were already revealing their limits as a species – too aggressive, and consuming too much in the way of resources; the tragic, unforeseen event determined their demise. We may suppose that this did not happen in an instant. They must have hung on, fought back, tried to change, and sought to reassert their dominance for some time, but in the end the environment was no longer what it had been and they disappeared, making room for more agile, more efficient mammals, and for small birds, that were better suited to the new habitat.

Our story begins in December 2019.
Before the pandemic.
A representative from the ruling party of a G7 country proposes a resolution committing the government to "*evaluating the advisability of initiating monitoring* and establishing conditions so that university education may be allowed for persons who will be childcare teachers, psychologists, or social workers, because these are professional positions of particular sensitivity and social importance, when such education is provided as a blended degree [i.e. with partially online courses], under the same conditions as the ones intended for the Primary Education Science degree program [i.e. without – or strongly limited – online courses]".

The Undersecretary in office (who will eventually become Minister) accepts the resolution and commits the government "*to evaluating the advisability…* etc.".

This was December 2, 2019.

The Council of the Conference of University Rectors (whose President will eventually become Minister) implements the resolution but interprets it in this way: "...the resolution through which the Chamber of Deputies commits the Government *to extending to the degree programs* that qualify persons to become teachers and psychologists... (redacted) *...the restrictions on remote learning* that applies, and must be applied for LM-85 bis [i.e., the Primary Education Science Degree]."

A commitment to evaluate thus gets transformed into a commitment to reach a decision with a clearly defined direction, i.e., banning remote education for a large set

of degrees! [Comment: The Council mentioned restrictions (for the Primary Education Science Degree) that don't even exist.]

This was December 18, 2019.

The Minister at the time takes note of the Rectors' request and publishes (*but perhaps not*) a decree that excludes distance learning from university classrooms for a fair number of degree courses.
This decree is the equivalent of saying that in spite of the enormous transformations that are taking place, dinosaurs must neither become extinct nor evolve.
It was determined that university education backed by digital technologies is qualitatively inferior to traditional university education. A veritable act of *analog snobbery* not supported by any evidence whatsoever other than anachronistic prejudice and, perhaps by a fear of empirical comparison.
The only arguments in favor of that decree are the ones that transpire in comments by the usual intellectuals.
These comments run the gamut from the nostalgic, demagogic question, "*So, you would put your child in the hands of someone who got a degree online*?" to the international (but inaccurate) comparison that, "*at Harvard, 6 online credits are worth 2, but in Italy, they are worth 6*".

This was December 23, 2019.

Just a few hours later, the Minister resigns and is replaced by the Undersecretary and by the President of the Conference of Rectors (in the meantime, the ministry is split up).

In other times, I would have provided rebutting arguments based on scientific evidence and on facts, and I would have written that this was an act of *digital Prohibition* inspired by arrogance, malfeasance, ignorance, and fear.
But those times have passed.

That mysterious decree was never published by new Minister (or rather, it was spotted for a few hours on the Ministry's website but then vanished). And it never took effect. The universities were forced to change their curricula and their teaching methods, but in the end the decree was withdrawn when the Court of Audit, in an initial audit, failed to give the decree its *seal of approval*.

After a few days, the educational system – and the university – is closed. The pandemic is hitting hard, and tragedy is spreading throughout the whole country and the whole world.
Suddenly, and literally from one day to the next, schools and universities undergo a Copernican revolution.
Everything digital. Everything remote.

Teaching, degrees, exams, meetings: everything remote, everything digital.

Of course. An extraordinary situation is fought with extraordinary measures. But tools are needed to do this. Luckily, we had the tools (try to imagine what could have happened if a nationwide lockdown had taken place in the '80s or '70s).
Instructors and students in schools and universities discovered that digital education is workable.
They discovered both its strengths and its *weaknesses*. Certainly also – and especially – its weaknesses!
Nobody is dreaming of a world in which everyone – both students and instructors – is shut up at home, connected only via a videoconferencing platform. No one is hoping for and theorizing a complete absence of social relations and proximity. And nobody is denying the importance of being in a classroom and sharing things physically. Anyone who argues to the contrary is clearly doing so in bad faith.

Nevertheless, it was possible to experience on a large scale that digital teaching may be a useful tool. It was certainly used in a rough, improvised manner, but people made virtue out of necessity. And, in schools and universities, some excellent results were obtained that may be used for reflection.

Later.
But later is already here.

And this is precisely what the usual intellectuals have begun to denounce. They are demonizing digital teaching using adjectives that make people cringe, and they are preparing the way for *analog restoration*. They are even going so far as to state – between the lines, for goodness sake – that this digital upheaval denies students their educational rights.
Excluding the systematic use of digital media in learning environments is tantamount to theorizing and putting into practice an anti-historical separation between schools and society.
Digital technology may, in fact, contribute to improving learning environments from a renewed, Comenian perspective: teaching everything to everyone and completely (*omnia omnibus omnino*).

The tragic health emergency has shown that digital technology has allowed educational content to reach people whom social-distancing measures had physically excluded from places of learning. Just as, well before the pandemic, distance education had allowed working adults to access university education in new ways.
If, during the health emergency, the quality of teaching was not high everywhere, if not all of the population could be reached, and if some people were excluded, the problem lies not with digital technology but with

inadequate educational policies. Just to give one example: the right to education also means equal opportunity of access sources of knowledge, in other words: internet connection must be free and guaranteed to all students; devices and equal access conditions must be guaranteed to all students; digital skills in educational environments for students, teachers, and organizations must be continually developed and updated.

Teaching everything to everyone completely is possible today, thanks to digital environments.

This was true even before the pandemic.

However, what the intellectuals don't want to understand is that the world has suddenly changed (a tragic, unforeseen event). That the ways of thinking that were used earlier – clumsily – are now even more out of place and anachronistic. That digital customs have now become a part of everyday life. That there is a need to reimagine how to *integrate* the new, mass digital culture into educational and training processes. And that there is also a need to think again about a new digital culture, a new digital education both in a positive way and to prevent, mitigate, correct aberrations, inequalities, excesses.

On one point we agree with the criticism: if digital education is used as a simple replacement of what is done in presence, then it merely is a pale and weak imitation of traditional education. This is unfortunately what largely happened during the pandemic, when educators and scholars were not prepared to use digital tools and methodologies had to adapt in a matter of days. Sometimes hours.

In short, in order to propose a new phase of **DIGITAL EDUCATION** that is able to combine *essential physical relationships* and relationships with digital media.

Able to plow the good fields of methodological innovation. Able to combine the right to digital citizenship with the right to training and education. For everyone. With digitally mature professionals, teaching staff, and society.

Digital and traditional education are complementary, and one can enforce the other. We can go further on to say that in the future one will not exist without the other. The key is not whether teachers and students are separated by a monitor. The key is instead the ability to activate the processes involved in learning and – mainly – in personality and social environment building, and a combination of strategies is the best form to do it.

We are a long way from that. The *analog restoration* movements are already underway. The usual *comedians-scared-warriors* are already on the move, often oblivious to the looming tragedy, sometimes denying it and imagining – in the short term – classrooms full of students who are hugging each other tenderly. Unfortunately, it will not be like this for a long time.

And this is what is most tragic.

The analog intellectuals (or perhaps analog ignoramuses, since they ignore reality) go around cities looking for classrooms for face-to-face teaching. They do not have the education and sensitivity to look at a map of infection in the world to try to understand what is really happening. They are driven by religious ideology. They forget (with good intentions, hopefully) that we are in an emergency situation. An educational emergency as well. And that the world was not prepared and still is not prepared for it.

The need to explore and prepare action plans in the event of educational emergencies is becoming clear.

In any building, there are instructions on what to do in case of fire, an earthquake etc. There are frameworks and organizations for dealing with emergency situations. But nothing exists related to how to act and react in a context in which a serious educational emergency is identified. Not in any country in the world.

We all acted and reacted generously and to the best of our abilities, but with no plan that provides for a chain of responsibility, training, actions, resources, and assistance to families and students and... teaching and training methodologies, whether they involve the use of technology or not, that are capable of providing answers and instructions to teachers, students, families, and organizations. This is also a lesson that we may learn from the pandemic.

But we could go further on and declare the *emergency in education*. Traditional approaches cannot keep the pace with the digital evolution – accelerated by the pandemic all around the world. Even in the absence of a pandemic (hopefully soon!), we need to evolve, and work on the best way to operate educational processes, with all the tools (traditional and non-traditional) that can serve the scope.

Oh... except for the analog ignoramuses who are still religiously searching for classrooms in all the cities.

It's time to come to terms with reality.

> *Eventually, the dinosaurs went extinct, precisely because they failed to adapt to their new environment.*
> *They failed to evolve.*
> *But out of their extinction, Homo sapiens was born.*

Acknowledgments