
The digital landscape of the future is so huge, successful human integration with it today will require a concerted and unified effort by everyone being impacted. Essentially that means you the reader, alongside roughly 7 billion other people as well. To set the tone it might be wise to inform those not in the know that in 2018 the data showed only .003% of the world's population knows how to code. That translates into about 28 million programmers for 7 billion people who speak to machines daily. Safe to say, technical and emotional literacy education is the wellspring to all human survival. To thrive as a species by taking profit margins at the expense of humanity is not only irrational but obviously unsustainable. The evidence of which can be clearly seen through the lens of our current global pandemic and economic crises. It doesn't take a PhD degree to understand that an emotionally intelligent and technocratically fluid society will impact *every* aspect of human evolutionary integration there is for generations to come.

The impetus behind Project Gnosis was to develop a holistically dedicated educational program / platform / community/ domain/, providing teachers, students, and by default, families with a cohesive interdisciplinary approach learning how integrating technology (*knowledge*) with emotional skill sets (*power*) leads to authentic and successful skill based outcomes. Effective emotional resilience strategies combined with hard and software skills is *vital* for navigating a future currently driven *exclusively* by ***big*** profit data algorithms.

The understanding that *nothing* replaces the value of face to face and real time personal human interaction is a given. But when the world falls to its knees due to a rapidly spreading and life threatening pandemic virus, a reprioritization, if only for the interim, is a must whilst looking for long term and sustainable solutions. For all the havoc a technically illiterate society puts on the human condition, ironically, it largely falls on the .003% of the worlds '*techno-literates'* to find a solution to develop a greater societal intelligence in general. This will require a genuine knowledge base that will lead to positive skill-based outcomes. History has demonstrated *repeatedly* when humanity is no longer able to keep the pace with their societal developments it is only be a matter time to adapt or die trying.

Inspired by several intelligent pedagogic disciplines, the gnosis (Greek word for knowledge) curriculum integrates a blended learning model including using a hands-on method of learning incorporating emotional intelligent *play,* as the basis for success-oriented learning. It is a researched fact, people, especially children learn faster and better when they are having fun! The need for digital literacy will fundamentally impact the future in all areas of society including the arts, environment, economy, science, technology, innovative industries and politics as well. Learning to code, amongst other social and emotional skill sets are a must to navigate our way into an AI driven future.

We are living in a digital renaissance. With or without a pandemic, science has now declared the fate of the world depends heavily on a human conscious paradigm shift in living. This is especially true for the field of education. Realised or not, human beings have been tech-driven creatures since the days cave

dwellers first discovered the benefits of fire. We are hard wired to learn how to adapt or die trying. Learning through play, positive psychology, combined with age-appropriate curriculum is key for successful learning outcomes.

Today few people would argue the universal language driving technology is coding. Coding is the alphabet of human innovation and development. The digitization and the internet of things is the platform that provides us with the opportunity to participate consciously in our own evolution. The problem though, while in some respects digitization and the internet of all things has boosted our imaginations, creativity without skill set has inadvertently made us lazier instead of smarter at using our imagination in the first place. While analytical thinking arguably birthed modern technology and by default surveillance capitalism, it has all but eclipsed the benefit of emotional intelligence in the last 25 years. Our capacity to create is not just using bricks and mortar anymore. It is digital, which is troubling considering more than 99% of us are digital illiterates! Finding the right blend between organic and artificial intelligence is perhaps the best chance we have to heal from what esteemed members in science, philosophy, and shamanism see as a virus called *humanity*.

They say it takes a village to raise a child. Today, we have finally achieved the means by which to unify humanity for the greater good. It will take forward thinking, globally minded educators, business developers, investors, and globally concerned citizens alike to make it happen. It begins by building and supporting a sustainable education platform (such as Project Gnosis') with an end goal to effectively transition humanity from being passive users of technology to the conscious drivers behind it.

A techno-fluid society can only be as successful as its primary educational platform. The operating systems put into place must furnish students with practical skill sets they will need to navigate themselves in a world driven by technology. To accomplish this, a complete pedagogic approach and curricular reset needs to happen, beginning as early as Kindergarten.

Technology today has thrust us into warp speed and we can only anticipate a continued acceleration in the decades to come. It's time to empower children to be the change we need to see and steer the course of human development for the better. Education is our only hope as a global civilization to get this right.

## 1 INTRODUCTION

People have been cognitively and technologically driven since the discovery of fire. Human curiosity combined with their innate lust for conquering the forces of nature, is perhaps one of the greatest contributing forces and threats towards the survival of the species. Today, without doubt, science, technology, and computer languages might well be the single most important cornerstone humanity has left to exploit as the final building blocks necessary to save humanity from its own ignorance. It is no longer enough to be passively interfaced with technology. The future success of our societies will largely depend on helping its younger generations become the drivers behind it. Suffice to say, digital literacy and intelligent integration through the educational systems [3] is our best course for action.

To say language [4] has been one of the greatest driving forces behind human evolution is an understatement. Without the ability to read, write, and develop the complex syntax of modern language, the world as we understand it today would not have been possible. Educational systems and their architecture have also demonstrated the value of structured learning as an efficient and effective way to support the healthy development of all world nations.

Consider coding as an advanced form of language development. Mastering this is key if we are to move into the flow [5] of Gnosis (as the Greeks say) or universal knowledge necessary to surf the next wave of human evolution. Education is the priority. The argument if it is served up face to face or taught remotely is irrelevant. What is relevant is education may very well be the last chance we have as a dominating species to save the world from humanity's own blind spot.

## 2 METHODOLOGY

Project Gnosis GmbH [1], is an multi-disciplinary and virtually interactive community dedicated to teaching kids everything there is to know about tech and emotional intelligent literacy. Since 2013, they have evolved into an interdisciplinary research and content development platform using technology and emotional intelligence to produce skill based outcomes for school aged students. They believe in learning-by-doing, social development through group projects, peer to peer learning, as well as self-paced and reflective inquiry (emotional intelligence literacy). Our research provided the evidence we

needed to develop our approach. The value of balancing screen time, practical hands-on, individual, and group learning to achieve successful learning outcomes was crucial for our program to succeed. The evidence for our learning approach came through after 8 years teaching beta courses with both controlled and random groups of students ranging from 8 to 18 years of age. The results, although testing in smaller groups of up to 15 students, turned out successfully. The P.G. team, their students, and their parents were very happy not only because of how quickly they picked up computer literacy, but the impact on behavior was positive as well. Parents reported their sullen, unhappy, uninspired kids transformed and became more engaging, happy, and reported a noticeable difference overall.

The project evolves through continuous consulting and interaction with teacher, students, and parents as well. It was executed in a way that everyone understood they were actively participating in the research and development of the overall curricula being created by Project Gnosis. Participants were either directly or indirectly consciously involved in the processes. This is a platform built by people who know, for the people who don't -but need to.

Respectively, if you grew up any time before the 1980's "internet" [9] was not even a thought for the vast majority. In fact, words like 'coding' wouldn't be used in mainstream language until many years later. With the exception of a few individuals, generally speaking, no one in the mainstream had a clue what the implications of the world wide web and internet would have on human conscious development until very recently.

Navigating our way forward, it is vital to slow the pace. School-aged kids *require* developing a unique skill set to become the drivers behind technology instead of passively enslaved users of it. It is no longer acceptable or even safe being '*passively interfaced*' in a digitized world [10] and internet of things [11].

Robots, smart phones, computers and software will not teach kids how to think, feel, or code any more than a calculator can actually teach math. These *tools* exist for support. Teachers play an instructional role.Contrary to popular science fiction, humans cannot be replaced by machines to do everything. Human interaction is vital if we are to learn from one another, and a big part of that will now happen online and virtually. Like it or not, the world pandemic is forcing people to adapt. Online platforms used only for conferencing are not enough for teachers to teach and students to learn. Thanks to a very clever EdTech team of developers, we now have a two way digitally *interactive* platform designed to mimic a real classroom as closely as possible. Being on line doesn't mean we need to sacrifice the essential emotional qualities humans need as social creatures. Creating lesson plans and virtual 2 way interactive interfaces are possible because that is what we are doing! Other supplementary programs vital to healthy social and emotional development can also to be taught and learned in real time in virtually interactive classrooms. Amidst a world pandemic, now is the time to learn and adapt more than ever. There is no argument that real time face to face learning is the ideal. But, if necessity is the mother of all invention, then thinking smart will take you farther than a smart phone right now. What makes organic intelligence superior to artificial intelligence is our ability to 'feel' our thoughts. Making sense isn't always black in white with human survival, sometimes the most obvious answer isn't it. It takes an adult at least 4 years to complete a basic degree in computer science. What makes people believe a robot can teach a 4-year-old to program in 6 months?

Learning to code is as relevant today as math, science and literacy was at the dawn of the 20th century. Technology drives everything. It affects us in all ways including our social, political, personal, educational, industrial, scientific, and economical structuring. So why aren't we teaching it to all school-aged kids? If math, language, and science are mandated as core subjects in schools because they are a necessary component of a well-rounded education system and the development of society in general, then why isn't coding? Programming languages are binary algorithms and the syntax, while logical, is not something which is learned simply by tinkering with robots.

Learning to code takes time and practice but is quite manageable if it is introduced around the time a child's critical thinking has developed (roughly 11+ years of age [13]). Before that, emotional resilience, critical and analytic functions in the brain is what is necessary and critical to achieve successful learning outcomes in any student.

For hundreds of centuries language [4] has shaped the world and the developing societies in which humanity has evolved and thrived. Programming is perhaps one of the most critically advanced languages of all time. Understanding mathematical algorithms (code) gave us the internet and quantum mechanics, which lead scientists to discover alternate universes and dimensions [14]. With something *this* significant, why we haven't brought coding as a core subject into schools is a mystery. The fact is,

most people don't really have a clue how programming languages work, let alone what they could do with that kind of knowledge if they did. What future generations need to get prepared requires an in-depth understanding of how technology has impacted humanity on every level from our psychological health to how we do business, handle economics, politics, education, the environment, and even religious/spiritual infrastructures. Technology has changed *how* we live, *where* we live, and *how* we will survive in the future. Project Gnosis is trying to be the solution in times of uncertainty.

Historically, knowledge has always been passed down from generations to generation. This is the first time in modern history it appears this will not happen. We cannot give knowledge to children we simply do not have to give. We are living in unchartered waters as we see younger generations seamlessly embrace whatever the internet throws their way. We are experiencing directly the impact for better or worse. The youngest kids today appear to be naturally endowed with an ability to incorporate the digital world with ease. In most cases they have more than surpassed the adults around them in terms of their technological interfacing. However, we are quickly witnessing the results of what happens when entering the unchartered waters of the virtual internet world. One need not look farther than what happens on social media [19] platforms to understand the powerful and often negative impact passive use of technology can have on the masses. It is not to say social media is to blame for what is happening in the world. Lack of proper education is. The internet and social media is not the problem. How we use it is. Our blind acceleration developing technology must slow down. We are only just skimming the surface in terms of what we know about the internet, its applications and implications.

The cornerstones of digital education must now be approached with an attitude that reflects the understanding that with great power comes great responsibility. Being passively interfaced with technology instead of actively involved in the development of it is anything but responsible. Just as it would be inconceivable to leave a container of gasoline and a pack of matches in a room with a curious 5-year-old, so is leaving kids driving blind in a world ruled by technology. We need to proceed with caution at the dawn of this very exciting digital age. The children are our future. What we invest in them today will either create or destroy the future for them. Understanding how to manage the digital world is vital and the doorway is found through education.

Fools rush in, or so they say. Project Gnosis, a grass roots company dedicated to education, took the time beginning in 2013 to slowly research the best method to architect off-the-shelf learning and teaching programs so kids could learn how to code. 'Tech Ed [1]' was a home-grown term before it became more popularized around 2014 in the UK as 'Ed Tech [20]'. At the time, no one else appeared to know what or how to handle the warp speed of tech development, the internet of things, global digitization and bridging the gap with education. This gave way to a home grown grassroots research initiative known now as Project Gnosis GmbH [1]. The philosophy of which was founded on four cornerstones:

1. It takes a village to raise a child.
2. With great power comes great responsibility.
3. Education is a human right.
4. Give children fish, feed them for a day. Teach them to fish, feed them for a lifetime.

Our planet [21] in many ways, has been decimated and overpopulated by its predecessors with no distinct plan in place to rectify humanity's transgressions. It has been suggested humans have become parasitic and viral to the planet. Something must be done to cure the disease of humanity's thoughtlessness. Is Ed Tech the answer? The team at Project Gnosis believes it is. Why is it that in the first quarter of the 21st century we still do not have a publicly funded programs in schools? It appears many of our politicians and policy makers would rather live in a kind of complacent fear of the unknown than embrace what change might bring. It is almost as if we have been programmed to live in blind ignorance and more often than not, greed and complacency is what lies behind the problem. They say it is better to be with the devil you know than the saint you don't, yet history [22] has clearly demonstrated what happens to people who cower in fear and walk the path of ignorance.

Technology is not the problem. Computers are not the problem either. Fear of change and what we do not understand, however, has in fact become our biggest problem. Leaving the digital landscape in the

hands of a few gifted individuals and a motley crew of self-taught teenage hackers is hardly a sustainable solution for the direction of either humanity or education. For example:

Coding and hacking led the way to the construction of a sinister virtual world known simply as the darknet [23]. It is a space where misguided self-taught hackers can go and quickly learn that indeed crime does pay. Between puberty and the underdeveloped cerebral cortex's of these quasi virtual magicians [24], the consequences of their actions are decidedly worth the risk in many cases.

"With great power comes great responsibility". [25]

Teaching people to handle the power global digitization brings depends entirely on how we educate them. Today, most education platforms hardly scratch the surface in terms of accomplishing this. Subjects such as ethics and philosophy are no longer considered mainstream core subjects in most of our civic curricula. What does ethics have to do with coding and tech? Everything. A moral or ethical compass is a very important tool when entering the doors to the kingdom of coding. For example:

The false reality projections of social media [19] on society (mostly kids) has set a dangerous precedent of striving for perfection. The consequences of which can be crippling at best, and deadly at the worst. In the absence of ethics, we see kids struggling to cultivate moral compasses in a degenerated [26] world that worships money and vanity abounds. False standards of perfection have made us too afraid to make mistakes. Worse still, admitting to making mistakes in the first place. The blame game, fake-it-till-you-make-it culture is slowly killing us. We even have an education system set up to judge students with a grade point system that fundamentally strikes the fear of God in kids when it comes to failing. Making mistakes for kids today is categorically considered the equivalent of failure as a person. This perception is simply false. In fact, looking at history demonstrates that humanity's greatest achievements and learning curves happen because of failure, not in spite of it. Mistakes [27] teach us a lot and support us in learning even more.

We are living in extremely unchartered waters, leaving a broad sector of society vulnerable due to a lack of education. As much as we have benefited from it, the tech industry/internet of things [28] has been monopolized by a handful of self-taught visionaries now recognized as the kingpins of the industry (Google, Apple, Facebook, etc.). That was an organic consequence simply because so few people understood the vision and potentiality of what technology and the internet would do for the world. These people are the trailblazers, pioneers, and visionaries of innovative thinking.

Every day we see and experience the serious vulnerability industries, such as politics, social media, and marketing, can experience as a result of mass digital ignorance. This could simply be circumvented and resolved with education. For example:

Few schools if any, offer data security courses. Cyber bullying [29] is just one example of the severe consequences that arise from digital ignorance. If you play with fire, you are going to get burned. It's that simple. In German, there is an expression "Dummheit tut weh", meaning "stupidity hurts". The internet and mainstream use of technology with no in-depth understanding of the impact it will have on people, especially children, is unacceptable. Education, more specifically technical literacy and understanding, is the only effective means to shine a light on the ignorance of the matter. Consequences such as cyber bullying and fake news [30] are just two of the harmful realities in store for humanity if we do not decelerate the pace of technology and take time to educate everyone better.

The rapid acceleration of technology without a concrete learning platform in place, combined with our voracious involvement in it is alarming to say the least. The insatiable greed for all things tech and the jaw-dropping revenues it generates as a result is creating a recipe for human disaster. We need to stop and think about the bigger picture for a change. No doubt Tech education will pay itself off in the long run. Flying blind is no longer an option where technology and humanity are concerned. Hoping and wishing is not an acceptable alternative to digitally intelligent integration for kids.

## 3 CONCLUSIONS

The world sits on the edge of a political, economic, environmental and social collapse. Many believe the one saviour [31] of the planet is technology. We have the means to use our intelligence to cohabitate in peace on this planet. We have the means to let every human being thrive. How do we cultivate this potential? Simple, educate [1] children. They are the future. They are the ones to heal the world but not if we do not give them a proper set of skills to work with.

If a ministry of education can mandate literacy, math, science and history, then coding needs to be on that list as well. Failing to do so in a technocratic driven society is not only detrimental to education, but also to the global economy, politics, technological development etc. Most people understand coding as having something to do with writing apps or creating video games. The general attitude is why learn to code when there are already lots of people creating programs? 0.3 percent of the world's population is hardly an excuse to remain illiterate. Coding is as necessary a life skill today as reading and writing was with the advent of the printing press. It's that simple.

To illustrate further, back in 2000, there was a young hacker who went by the alias Mafiaboy [32]. The 15-year-old self-taught Canadian youth managed to hack into several websites, including Yahoo and Ebay. The hack literally cost $1.5 billion USD in lost revenues during the few days he managed to crash the sites. Fortunately for us, he now works in security for his government. Some may wonder why he did it. The truth, although disappointing, is simply because he could. At the time, Mafiaboy [32] was an adolescent, bored and angry at his parents. He was looking to show off what he could do to his friends. In other words, he was a normal 15-year-old kid. He could not have possibly been fully cognisant of the consequences of his actions at that time. The cerebral cortex (centre of the brain where rationale is developed) in a human being does not begin to form until well after puberty ends. Today, what hackers like Mafiaboy [32] can do is child's play.

This is one of many examples of why Ed Tech is vital for protecting humanity and its future sustainability. Uneducated hackers/coders and cyber-crimes are almost always synonymous. They happen, because nine out of ten times, it pays without consequences. How is this possible? Again, because when more than 99% of the world's population today remain digitally illiterate those people in the know, will take full advantage. For now, it's still a winner-takes-all platform. The privilege that comes with this kind of power is still sadly reserved primarily for a precious few.

The founding team at Project Gnosis began with an idea: What would happen if all kids learn to code? The next thought was about implementation. After years of in-depth research, pilot projects, and after many trials and errors, a learning and teaching program was founded. It incorporated the many aspects embodied in the company's ethos, described in the four cornerstones below:

1. It takes a village to raise a child.
2. With great power comes great responsibility.
3. Education is a human right.
4. Give children fish, feed them for a day. Teach them to fish, feed them for a lifetime.

These four principals formed the basis to provide the necessary reform for future generations to preserve a sustainable future for humanity. Project Gnosis' research concluded that teaching kids about digital literacy, including how to code, and integrate technology intelligently, will build a better world and a safer society in which to live. Simply imagining how that would come to be was enough to keep the team spirit motivated and inspired to keep the proverbial ball rolling. What began as a small business idea, quickly shaped itself into a movement for innovative change in education to reflect the skill set necessary for kids now living in a world driven by tech.

The Project Gnosis research team learned categorically that an Ed Tech program designed to fit the analytic cognitive development process of kids would no doubt change the digital landscape for the better. It would generate an impact in almost every industry we could think of, including medicine, engineering, manufacturing, national security, agriculture and more. Scattered throughout the internet anyone can easily find amazing examples of how coding impacts the way we live.

Creating a technically fluid curriculum is a huge undertaking. It will take years to successfully bridge the gap and we need to take action now.

Look around. Anything electronic these days involves coding somehow. Somewhere in your home or office someone is likely logged into a smart device as you read this article. That being said, how many of them do you think can identify and understand what a CPU is? A microprocessor or microcontroller? What URL stands for? Understanding (at the very least) the basic mechanics behind what drives the world is important. Depriving kids from learning how to code and interface intelligently with technology is synonymous with human deprivation today.

Many of the greatest minds in science have postulated that the very essence of the universe is based on some form of mathematical algorithm. In other words, the physical world/cosmos of which we are a part is made possible by what is sometimes referred to as a kind of God Code [33]. Scientists are working hard to hack into it. The institute CERN [34] is another scientific research facility heavily invested in finding out more about the nature dark matter.

Now more than ever, we need visionaries to see the BIG picture. In the IT industry money is just the tip of the iceberg in terms of relevance to the human condition. The emerging Tech Ed market however, is the iceberg itself. The fact of the matter is that capital gains derived from a technically fluid world will directly affect more than just. the economy of the collective population. It will impact humanity on all levels. It is time to gather together forward-thinking, globally minded business developers, financial investors, academic advisors and concerned citizens alike, to promote a sustainable education system to positively impact humanity, and by default, all her industries.