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THE FUTURE OF EDUCATION IS NOW

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PHILIPPE GREIER | TATHYANA GOUVÊA



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ACKNOWLEDGMENT

A project of this scale would require many pages of thanks, but we will speak in general. We cannot underestimate the importance of each person involved in order to make this book happen.

First, the authors who have accepted the invitation to contribute to this book, have written their parts and have given us the rights to publish them. We hope these ideas will flourish!

The volunteer translators who so kindly agreed to collaborate with this project. The reviewers in Portuguese and English. Salim Thaifa, Galorian, Marija Popova and Ira Branitskaya, who collaborated with the collective funding campaign. Ivar Troost, Thais Avelino and Andre Tessmann who worked on the platform that will support the game distribution of this book. A big thank you to the immediate response and support of our English revisers Mike Curtis and Teresa Frith. You brought hope and joy during our last hours of finalizing this project. And the CONANE team that welcomed us to the launch of this book.

Dora Murano who designed the graphics and Daniel Araujo who illustrated the following pages, through the partnership and belief at all times in our dream.

The Porvir of the InnoveEdu platform that we mention in the chapter on experiences, and the people and entities that helped in the dissemination of this project.

Every collaborator of the collective financing campaign that supported this and other projects of transformative education, believing, impelling and making changes for a more just and fraternal world.

And to you, dear reader, who helps to build trust in times of change and makes a new reality visible. Pass it on to a person who makes a difference.

Thanks to you all for your great contribution!

Tathyana and Philippe

INTRODUCTION

*The instant is of an imminence that takes my breath away.
The instant is in itself imminent. At the same time that I live,
I burst into its passage into another instant.
Clarice Lispector*

To educate is to simultaneously preserve the past in what we expect for the future, at the present moment. Educational action is so spontaneous that we could say it is natural for human beings. In other words, to produce and transmit culture is human nature. However, that action, following modern industrial societies, has acquired greater complexity in previous centuries, gaining its very own place and science: the school and the pedagogy. Their wide expansion all over the planet indicates how both have served the purposes of men from the 18th, 19th and 20th centuries.

Some philosophers, physicians and educators have made harsh critiques to this hegemonic model of education all through the last century, but society has barely replied. In the 21st century, however, with the advancement of digital technologies, the liquid modernity that Bauman presents to demonstrate a more impactful process than Industrial Revolution itself, and the changes in the understanding of what is work and value creation, new models of preparing men for adult life started to be demanded.

Against this backdrop, thinkers of the 20th century were reclaimed, new schools were created around the world and many players, from big corporations to small town teachers, started to envision new educational practices that were more meaningful for the youth and for the job market, for the families and for the planet, for the state democracies and for each person's well being.

Back in 2013, I started my doctoral thesis referring to this subject. It was published under the title: "The Brazilian movement of

educational renewal in the beginning of the 21st century." To its elaboration I visited several schools in Brazil and reached projects and organizations that provided different stimulus to these initiatives. One of those was the NGO presente!, created by Philippe Greier.

I found it intriguing that a group of Europeans recently arrived in the country, who did not speak Portuguese and with no financial resources, had the aim of meeting and connecting with schools. I thought that the way they organized themselves was very peculiar, no one knew what the next step would be, and everything was going to be built with the human and financial resources that came along. I did not think that they would go far, but five months later I met them once again in Brasília, at the National Conference of Alternatives for a New Education (CONANE, using its Portuguese acronym), that Philippe had initiated and would create connection of events that would take place in a dispersed manner.

The first CONANE was a milestone in that movement, connecting over 400 educators, giving voice to a process that, although relevant, was silent until then. Afterwards, regional CONANEs took place, a second National CONANE and now in 2017, the third National CONANE will happen jointly with the Summit of the Americas (ENA, using its Portuguese acronym), where we will have the launch of this book.

The idea of this project came up in 2015, when I was finishing writing my thesis, organizing those experiences on theoretical grounds. Philippe was still traveling the world developing projects and connecting people and schools. We thought about uniting my desire to have records and the possibility of sharing those ideas on education with Philippe's network. That is how the EDUshifts book was born.

We invited several authors who shared their writings with us over the course of 2015 and 2016. We moved to searching for voluntary translators to help us reproduce the book in various languages and at the end we made a fundraising campaign for professional

review of the writings, as well as illustration, editing and printing of the piece.

The book will firstly be released in English (printed and digital copy) and in Portuguese (digital). It was developed 100% online, using digital resources of sharing and co-management, and will be available free of charge under the Creative Commons license. It involved two coordinators, 18 authors, 29 translators, 1 illustrator, 1 designer, 5 reviewers and 3 coordinators for the fundraising campaign. There were people from 20 countries and from every continent.

To live the elaboration of this book could not have been a more immersive experience of the contents presented in the following pages. It was amazing to understand the potential there is in the network: people all over the world donating knowledge, time and resources for a project of people they don't know, friends of friends or Facebook colleagues. If one word could sum up this project it would be generosity. People giving themselves to others on behalf of the project.

In a similar fashion, we can see that same commitment in the experiences shared in this book, both from invited guests and from our own glossary of experiences, that tries to give examples of current projects that already develop the concepts introduced by the authors in their writings about the future.

The glossary was written based on the InnoveEdu platform from PorVir, in partnership with Wise, edSurge and Innovation-Unit. The original chapters were written freely with no restrictions on format, size or content. We only asked each person to write "several pages on their beliefs and dreams for education of the future," the result was a multiplicity of writings, from academic papers to interviews full of stories, from recounting of experiences to philosophical propositions, some more extensive, others quite brief, all evolving, intriguing and propositional.

Philippe Greier describes a utopian outlook on a societal transformation, demonstrating that this process is already underway.

Adebayo Akomolafe and Manish Jain provide examples around the world presenting educational proposals that serve as alternatives to the conventional model. In the writing of Axinia Samoilova we have a report on a Russian educational experience with considerations based on Makarenko's research. With Flávio Bassi we reflect on the transformative competences adopted by the Ashoka program. Flor Dillon details the experience of free education in Inkiri, a living university in the south of Bahia (Brazil). Floris Koot goes beyond criticism to the traditional education and introduces possibilities for an education of the future. Galorian widens the universe of education and offers in his writing a reflection on the network society and its possibilities. Gerald Huether brings us the most advanced contributions on the human brain and its impact on education. Helena Singer talks about social movements and points to the reasons why we are in a favorable position to change. José Pacheco reflects about community-based education and shares his experience with Escola da Ponte in Portugal. And Ku Kahakalau talks about the tradition and modernity of the Hawaiian native culture. Philipp Mäntele offers details on his educational experience setting up a social innovation academy in Uganda. Thereza Pagani, recounts her vast experience as an educator through play. Thomas Heide, in a dense and brief piece of writing, graces us with a new paradigm to rethink education. Tião Rocha brings us closer to the Earth and the tradition to devise the education of the future. And Yaacov Hecht, in a very explanatory article, exposes the basis of democratic education.

May this book inspire us to create the future we want! With affection,

Tathyana Gouvêa

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EDUCATING FOR AN AGE OF WISDOM

A UTOPIAN TESTIMONIAL BY A TIME
TRAVELER FROM THE YEAR 2184

Philippe Greier

Dear early 21st century people,

I bring you a message of hope. Your society slowly becomes aware of how everyone's decisions shape our collective future together. It's the proof we need to show how everyone matters. And in that collective journey education is an essential key to spreading that message; not only as knowledge, also as experiential wisdom. Because living from this insight turns it into a value that makes all the difference. The possibility of a flourishing planet with healthy communities is a reality.

Much of the work will be replaced by robots; much decision-making will be done by A.I. But conscious people of all ages and ranks seek to be beneficial to society in many, often very personal ways. The dangers of pollution and global ravaging are over. Not that all troubles are solved and still political differences lead to confrontations, but as a whole, you are doing so much better for everyone. Nature is present, even deep in all cities, which have become wondrous gardens full of art and learning. It's not the Golden Age of nations, but of small communities around the whole planet. And for that hope to become a reality, the value everyone and everything matters have to go global.



In your day and age, there's a growing awareness about the urgency to divert human destiny from the path it is on. In my timeline hope became a reality. That doesn't mean your reality has mine as a fixed destiny. For that, you need to follow and see both the need and the possibility of that destiny.

See it as a predictive dream. But let's start where you are at, and how you can bring about a much-needed shift in perception and society.

A REALITY OF EARLY 21ST-CENTURY SOCIETY

When we look back from the year 2184 at the beginning of the 21st century, we wonder. Why did so few people see the danger their society was in? Was it because power and technological advances were seen as the pinnacle of civilization¹? This perception of the West being the highlight of civilization already became a threat during the 20th century. Warnings from other belief systems, such as indigenous peoples, were hardly taken seriously. Within the Western World, the predominant system had hardly been questioned, while its disadvantages were becoming clearer and clearer. Disappearing forests, the rise of dead zones in the oceans happened outside the bubble of mainstream media, or as one could say, an enormous amount of propaganda selling consumer goods, marketing the freedom to buy by getting rich. Few minds could think beyond it, so critical questions were mostly evaded. Even though leading scientists gave warnings. The most prominent figure with an anxious outlook on humanity's future was Stephen Hawking, who stated the following².

Now, more than at any time in our history, our species needs to work together. We face awesome environmental challenges: climate change, food production, overpopulation, the decimation of other species, epidemic disease, acidification of the oceans. Together, they are a reminder that we are at the most dangerous moment in the development of humanity. We now have the tech-

nology to destroy the planet on which we live, but have not yet developed the ability to escape it³.

At the same time, the Western World used the advancement of their belief systems as an excuse for the advancement of their political power. This was essentially not different from in the way the Spaniards in the 16th and most Colonial powers in the 17th and 18th century had used the Christian faith as an excuse to conquer and colonize claiming to be bringing the 'light.' The West now mainly used the 'advancement of democracy' as their excuse to pressure governments into 'choosing' elites that would accept Western businesses to establish new markets and production sites, or to obtain 'rights' to plunder natural resources. Corporations became more powerful than countries. They bribed or even bought governments to not hinder their self-enrichment at the cost of peace, freedoms and essentially the whole ecosystem.

THE NEED TO CHANGE THE RULING PARADIGMS

The natural world became severely damaged during the end of the 20th and beginning of the 21st century. This damage triggered climate change, wars, and disasters. And still, most people thought the pinnacle of success had a powerful role within these damaging global structures. How could one question powers that seek to bring enlightenment to backward people? How could one question an educational system that offers access to the elite and promises power, safety, and wealth? How could one question a system that was seen as the highlight of civilization? One can't. Being the first among many surely blinds essential senses⁴.

Civilization is not yet prepared and educated towards a brighter future. Citizens feel caught in their personal stories, struggling with pain that holds them back from evolving towards a liberated society. Realities are based on scarcity instead of the idea of abundance. People have been paralyzed because of fear or a lack of

understanding how to lead through times of uncertainty, but with shifting paradigms. Luckily that is the time when people started to wake up, and many realities flourished with hope. But at first, the world will come to the edge and shift apart.

Political power struggles and lack of alternatives in governance create uncertainty among people. The disconnection between the political system and the citizens has been becoming obvious. Decision-makers in power are caught up in their own net of self-interest. Many of them have built up a reality that is so disconnected from what the majority of people experience that they feel reality became a cage for them to make wise decisions. Violence has shifted towards the center of western mainstream societies, and it becomes obvious that fear keeps people from moving on and evolving. Extreme nationalism and rising poverty among the ruling middle class have triggered a counter-movement that is not limited to regional and national borders. It has brought the society to a point where many feel the need to step out of their boxes and to collaborate. Constraints that people felt at that time, their self-reaffirmed cages and boxes of perceived comfort of the modern world are breaking apart more and more.

That is the time when people understand that their only chance to avoid global catastrophes was by working together and collaborating beyond market and national interest. More and more people are certain that they need to let go of what education has been cultivating for generations and generations. People start to question and reevaluate what they had taken for granted for generations. It is necessary to unlearn what they have accepted as truth and as the only existing realities. It is challenging since their way of thinking and acting came from their education, as well as from their culture. And that education is rooted in systems that were based on capitalistic and linear thinking. The transformation of society asks for education that will serve the whole and not just the need of businesses for educated workers.

THE WAKING UP TO NEW EDUCATIONAL STORIES

So how did the shift happen? How did those, that felt the need for change, make it happen?

Schools and Universities have been mirrors of the existing society that reflect to a great extent how societies had been challenged. Education in the 21st century is not a national concern anymore. Almost any education system around the world suffers from similar challenges. Traditional education has served the predominant system and power structures based on standardization and centralization. However, information and knowledge have been growing exponentially. Problems caused through nonlinear development cannot be solved by separation and strict hierarchies. Large parts of the society are still trying to tackle the world's challenges in a manner of linear thinking. The good news is that there were solutions out there.

Public schools and universities, even though in small numbers, have already been developing to different forms of education. Teachers all around the world work extra hours to compensate for the shortcomings of the system or design creative styles that better serve their learners. But they need support very badly. And help is coming. Slowly and under the radar of the mainstream media and governmental, educational systems alternatives are being discovered.

THE RISE OF LOCAL SOLUTIONS

Grass root solutions, some also within or with the support of the public education systems, occurred. Pioneering educators, teachers and principals, frustrated parents and progressive digital natives take part in increasing and distributing civic movements to overcome the challenges that rose through outdated education systems. Multicultural and interdisciplinary approaches to education enables us to create a unique perspective on problems of the

predominant systems and identify the most meaningful solutions. Every day millions of people dedicated their time, energy and inspiration to help others to learn and evolve.

A growing number of parents and students initiatives have been popping up. Parents are looking for such solutions for their kids that will offer them a personalized education based on the dreams and needs of the young generation. Their new approach to life will help them to step out of painful processes riddled with the fear of failure in order to create safe spaces that enable people to fully develop their potential. Each individual has different needs and abilities that need to be taken care of. In a time of acceleration the growing complexity, degrees⁵ have lost their significance and learners are mainly confronted with questions like: “Who am I? What do I REALLY want to do? What are my values? What belongs to me and what doesn't and what should I follow to be more myself? How do I combine my passion with my purpose? Do I want to work for creating a living or live for working? Do I want to work? Which systems do I want to participate in⁶”

To step into the age of wisdom people need a preparation that enabled them to fulfill their potential. Personal networks become support communities for somebody's learning path and create that safe space. It is more valid to get confirmation from people who trusted you and what you can create rather than having certification⁷ of a single institution that has given a limited understanding of somebody's skills and talents.

The transformation of education has often not been clearly seen by the general public. The perception of realities is still biased by mainstream education. The public discussion is dominated by mainstream media influenced strongly by a western perspective. Transformation often takes place where no one expected it. All around the world, transformative events take place that are impacting the global transformation education. Those events rarely happen in the western world even though they would have more immediate influence on a large scale⁸.

STUDENT OCCUPATION IN BRAZIL

The occupation of schools in Brazil was a great example. Something amazing happened there in 2015 and 2016⁹. It showed what was possible to a traditional national education system that had been failing. It was the year 2015 when the state of Sao Paulo decided to restructure their education system and shut down public schools without including students nor teachers in that process.

However, students resisted. They started a movement to occupy their schools when the São Paulo government began forcing their agenda to close schools¹⁰. And the students succeeded. After violent fights and a public outcry, the government had to stop their intention.

In 2016 the Brazilian government had been responsible for setting up a law, called PEC 241 that cut investments in education and the health system. The law reflected the absurdity of that time. The country had undergone severe crises, especially in the form of corruption up to the highest political circles, when the people in power decided to cut the budget for education. Again the strong reaction of students forced the government to take back most of the planned reforms concerning schools.

The Brazilian school system, in general, had not been well in order at that time. Many kids went to school only for 4 hours. There was a lack of basic resources like books, school desks, or chairs. In general, teachers were badly prepared and reputed. They had a very low salary and were poorly educated. Language teachers did not speak the language they had to teach. Difficulties occurred because of the huge geographic and economic challenges that the country had to face. Up in the north school, kids are taught on boats or needed them to travel to school. In some regions schools were the place where they received food since their families were struggling to meet these basic needs.

As it was, the lack of resources and troubled infrastructure enabled a great culture of innovation and down to earth solutions. Tapping into a richness of cultural and indigenous influences people run exciting education programs in samba schools, capoeira com-

munities and vibrant ecosystems of artists. It was the perfect birthplace for universal education and innovative learning solutions. The region around Brazil became a vibrant ecosystem of change and a growing leader in the post-truth era in the transformation of education supported by a well structured alternative education network in South America¹¹. Other regions that have experienced a rapid transformation were India, New Zealand and the Ukraine.

Disconnected and distributed. Therefore, the change of education will be more an evolution, which has to happen urgently, than a revolution.

UNITED LEARNING PATH. FROM A COMPETITION MINDSET TO COOPERATION

For a long time alternative schools, education initiatives and grass-roots movements have been acting alone and isolated. Innovative solutions have not been known to the public. Sometimes not even to each other even though they have been working in the same region. The richness of that vibrant ecosystem comes to life when educators and decision makers start to open up for collaboration¹². When the time comes to combine forces of existing solutions, different realities of education would be manifested.

Civic movements and progressive educational projects learn to connect and communicate with each other in more effective ways. Sharing experiences and learnings, even resources and tools help each to evolve at a rapid speed. Education innovators join forces with parents, students, and professionals from diverse areas. Many of them had different visions and approaches. But there is a mutual intention and need of relieving the pain that has been kept in the education systems for generations. Due to the urgency of this transformation, it is not the time to discuss what has been the right methodology or approach. It is the time to embrace a broad variety of solutions from unschooling to alternative schooling models like Montessori, Waldorf, democratic education or even traditional education to provide a healthy choice for the learners.

DISCOVERING THE ESSENCE OF LEARNING

Local and professional communities will automatically take care of the quality of the learning process. That natural quality control will happen in a self-organized process that is triggered by the increasing connectedness among peers and high transparency through technology. The mental process to accept not being able to control this process is the largest boundary for society. Trust is essential. Trust in a collective learning process. Trust to each other as individuals without pre-defined perceptions or solutions. The age of wisdom is based on trust.

Traditional institutions such as schools and universities discover through that process the freedom of using their creative autonomy. More and more public organizations specialize themselves according to the interest and informal knowledge and expertise of their teaching staff. Over time they develop trust to join that ongoing transformation process. That process is based on local support of communities, other schools and experienced pioneers in education. The teaching staff participates actively in that development, as well as students and parents. All are treated equally. All of them enjoy that learning process since it is liberating them from unhealthy structures. Often it is not even a legal question but the matter of having the right mindset and courage to make a step out of the dilemma.

That development enables the rise of informal learning spaces. Protected and safe spaces where people can learn without any agenda. Where they can test and experiment. And make mistakes. It is the time when people start to see learning opportunities everywhere independent of time or space.

That is also the reason why there is no need to compare nor discuss different methods or systems of education. On a personal level, some are better off with Montessori, some with the Democratic model and a few preferred even a traditional learning environment. What is important is just the variety and that people have the power to choose and decide for their own good what was best for them and their kids. The modern school is distributed, self-organized and independent on location.

A DEEP TRANSFORMATION OF SOCIETY LEAD BY AN INTERGENERATIONAL COMMUNITY.

When people understand that they could free children and students from standardized curriculums and learning environments they start to see possibilities of realizing their own dreams and passions. Freelance working opportunities, fluid networks, and open companies will become a reality for a big part of society. It is a time to overcome the fear of making mistakes and understanding diversity as an accelerator of transformation and a liberated lifestyle. Safe spaces have been set up.

Alternatives in education, non-traditional learning, and working environments have experienced a momentum as more people looking at alternative lifestyles and ready to leave their jobs and prepare for a better future. People start to believe that they can change humanity. That they can accelerate the change. It is the decolonization of a fixed mindset.

Millennials and digital natives have been grown up with information technology and naturally used its benefits. They identify alternative approaches to learning and best practices in education as opportunities for personal development purposes and collective learning. The young generation conducts learning journeys to intentional communities and alternative universities using technology to be connected and to enhance their learning experience.

In learning environments, people can connect with the most powerful change makers. Kids and millennials. Kids that have not been manipulated by an outdated system and their value of teaching how to dream, how to think differently or how to use the latest technology become of value for a great part of society. Elders, innovators, social entrepreneurs, lawyers, former business consultants, and bankers, lifelong learners learn from each other and with each other. That multicultural and intergenerational approach enables parts of the societies to create unique perspectives on problems and to envision different possible realities.

A long process of shifting interest and power will take place. For many years the world becomes fractured in its existence. Parts of the society will remain in the energy of survival and competition, whereas more and more people do not accept the status quo and empower themselves in smaller groups of interests and local communities. A new generation of changemakers has been educated in social technologies like Art of Hosting, Non-Violent-Communication or Dragon Dreaming. Whoever feels driven to take action and is willing to put in personal efforts and resources to transform broken systems is bringing in awareness in a self-organized way¹³. People will understand that existing market mechanism did not fit the autonomous and growing interdependency of learners and workers¹⁴.

Transformation of education requires new economic models. Local communities start to apply principles of the alternative economy models on a larger scale. During a transition phase, basic income is used to unlearn the concepts of capitalism. Shared economy principles are applied since everybody becomes a creator of knowledge and can be compensated. Wealth and power are relocating through elements of the gifting economy. Democratized education is financed by the rich and wealthy the then-called top 1%. That dynamic causes solutions to reduce world hunger, poverty, crime, medical needs and education shortcomings. People will understand that they can live in equality and abundance.

MUTUAL CHALLENGE: CONSCIOUS USE OF TECHNOLOGY

Our world is accelerating. Our world has become so complex, and the transformation is accelerating with the growing use and sophistication of technology. Independent of class, race, gender and nation we get access to information and can experience different realities at the same time. Technology enables more comfort, and the first progress with Artificial Intelligence and Virtual Realities devices has given a glimpse what will come on that timeline. Personalized

learning does not stop within the walls of a school. People have not been ready to learn in a self-directed way but can make a jump in our evolution with peers and the infrastructure of technology. With their knowledge and consciousness, it is time to liberate themselves.

During early days the use of information technology is just reinforcing outdated structures like the hierarchy in the learning process. Handing out tablets and following standardized curriculums does not necessarily mean innovation. Technology has not only enabled various forms of individualizing the way people are learning. Personal needs and learning habits are identified and met through computer games, individually composed education programs. Technological solutions give virtual access to expert knowledge of areas of interest. It enables the creation and sharing of knowledge among peers.

Uncertainty through the use of technology is still widespread – especially in education. Historically technology has been used for centuries to separate. Until the 21st-century, humans have created a disharmonic society in which poor and underprivileged communities have had limited access to technology. That advantage has been very much used to create a dependency and inequality. People lost themselves in this process. The bright future of individualized learning environments but also the use of robots as teachers seems far away even though technology has already been present and prominent futurists helps to see possible futures. In general, these technologies have not only been becoming more powerful at an exponential rate, according to Ray Kurzweil's Law of Accelerating Returns¹⁵ but also increasingly accessible to small groups and individuals¹⁶.

For the first time in history, technology can be used for building bridges and connecting various realities and not only supporting preliminary power structures. Important for this development is that the Western world is connected with its values and starts to listen to and to learn from other cultures. With the guidance and leadership of indigenous people, the West can learn to connect with themselves. Indigenous tribes preserve the connection to nature and practice values that had been forgotten in the western

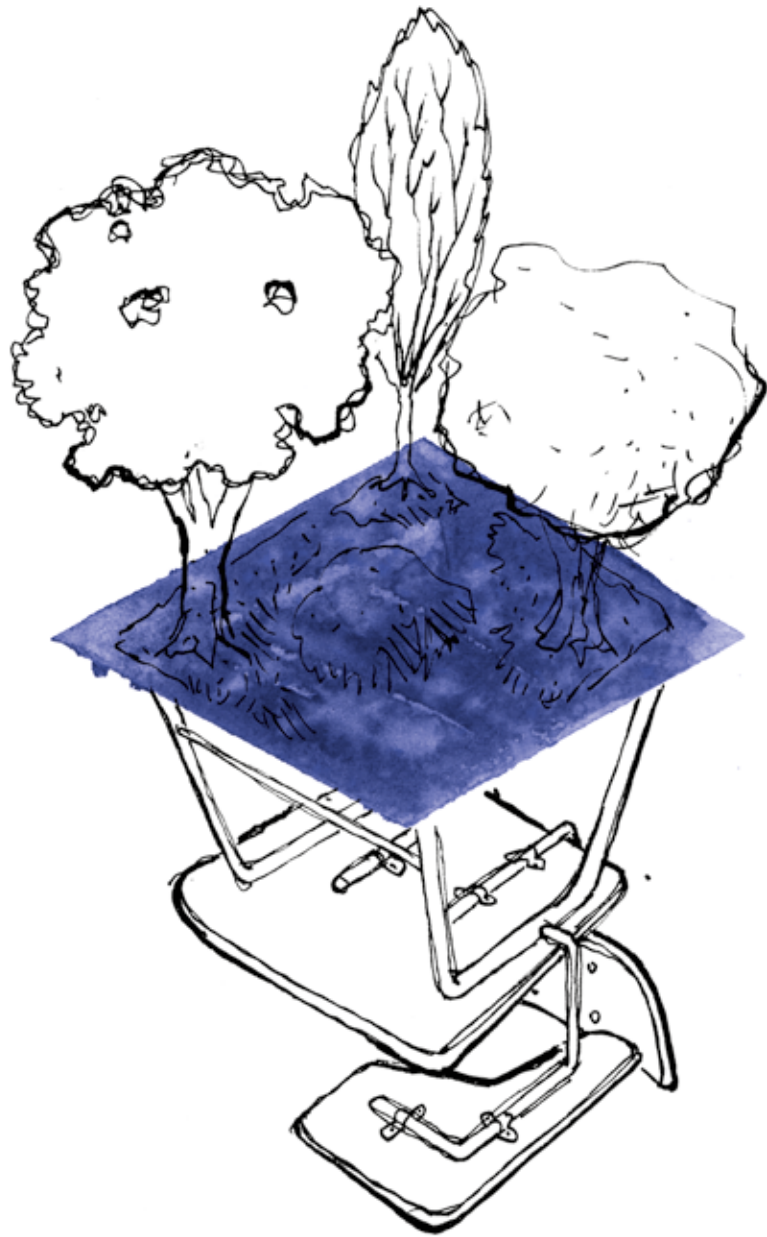
world through industrialization and an unhealthy way of competition. Together people can be aware of the threat of AI and robots. Of technology. And use their fear to stay alerted.

In the meanwhile new confidence has grown. And by evolving as a global collective more and more communities have started believing that a utopia on earth is possible. That the sea and rivers can be clean, without plastic and full of fish and life. The air can be fresh and clear everywhere that even rainwater could be drunk. Cities are not only green and peaceful, but all people have places to stay and live. Food that is healthy and delicious. Machines that do not need energy but would give. Work that is done by robots and enables people to dedicate their time to social causes.

MY WARM INVITATION

So this is how many of you, the early 21st century people, stepped on this path of hope. And my message hopefully helps to gain the momentum needed to turn that hope into the reality I speak from. This message does contain elements of how to change educational paradigms. The education revolution is an evolution triggered by our societal transformation. Technology and social innovation make it possible and a collective consciousness is the fundament of it.

Together with the other messages in this book, these can become key to unlock that destiny, that many long for. Healthy people in thriving cultures in a flourishing natural ecosystem. This story is about to be written now. And you are one of the authors.



NAME THE COLOR, BLIND THE EYE: REIMAGINING EDUCATION

Adebayo Akomolafe | Manish Jain

Around the world, going to schooling is such a normal part of growing up today that to question its legitimacy, to even hesitate a bit, is to attract blank stares and harsh criticism. How else does one expect to learn unless you are taught in school? How would one do well in an increasingly competitive world except you get a job that pays your way through? Isn't it a crime to even consider denying a child the right to education? Aren't these things encoded in international charters and laws? Why are you even asking these questions?

And thus goes a possible (and very familiar) series of questions one encounters from citizens of a mass industrial culture that has evolved to see institutionalized formal education – with its hierarchies of degrees, battery of tests, armies of teachers, skyrocketing fees, and Western bias – as the only legitimate way to think about learning. Schooling – like many once indisputable institutions before it – is perceived as 'natural' and 'indispensable' – supported by governments, promulgated by an expert class, championed by fearless NGOs, advocated for in public service announcements, and promoted even by the most left-leaning progressives.

This fundamentalism of formal education is so entrenched in our ways of seeing the world – especially in the so-called global South (where the imperatives of 'catch-up' still burn brightly) – that

even when a crisis in education is acknowledged, it is to complain that there isn't enough of it. Recent perturbations in the educational landscape of Africa, particularly in South Africa, have inspired narratives that bemoan the 'undue union influence, poor teacher content knowledge, [and] too little learning time' as reasons why South Africans are not really learning¹⁷. In India, an article reporting the failures of the country's 'Right to Education Act', noted that 'more than half of its 5th graders can't read', and called for sweeping transformations to the country's paradigm of learning¹⁸ – mainly by selling more technology solutions to lubricate the exhausted gears of schooling. What easily escapes awareness in these times, when unusual cracks are showing up in our social edifices, is that schooling itself is a crisis of magnificent proportions. And that attempting to fix it, or problematizing a lack of access to it, is part of a world-making practice that excludes and silences a disturbing truth: that there are many other ways to learn and live in the world.

An old Zen saying insists that to 'name the color' is to 'blind the eye.' It's an important observation with implications that touch upon new materialist knowledge, to wit: the identity of a 'thing' or an 'object' is created in a relationship; relationships create objects, and not the other way round. Blue is only 'blue' because of the specificity of the apparatus that measures 'it.' Change the measuring apparatus, and the very ontology of the object changes – as is the case when light behaves like a particle or behaves like a wave, depending on the way it is measured. What's important about this point is that to see is to exclude something from the equation. The more strenuously you seek to measure a phenomenon, the more potently you silence its complementary status from mattering. Hence, to name a color is to blind the eye from noticing other realities.

Schooling is the modern practice of 'naming' and 'taming' learning. To account for its mercurial expansion is to lean in on the historical, social and spiritual dynamics that brought it into being – specifically the western industrial quest to remake the entire world in the monochromatic image of civilized citizen-consumers.

Even with well-intentioned projects that seek to bring 'education' to the global South – to save the uneducated, poor child or liberate women and downtrodden people – a stream of epistemological and historical colonial influences and manifold exclusions still unfurls. With every educational tool imported, with every textbook generously purchased for a child starved of schooling, a world of learning is made extinct.

The white man's burden, or deep desire to 'uplift' or 'free' the 'little brown and black brothers and sisters' by killing all that is indigenous and wild in each of us, has driven the spread of this monoculture institution all

over the planet. But one must ask whether these 'good intentions' have led to greater liberation or greater enslavement for the 'educated' and the 'developed.' The World Bank-cited perceived benefits of literacy and school attendance such as improved child mortality and gender equality from increased income, blind our eyes towards many other unsustainable externalities that have come with modern education such as over-consumption, the breakdown of community, displacement, debt, pollution, suicide, and corporate control. Now, those of us who are recipients of schooling must face uncomfortable questions as 'educated' people: do we actually have more power or less power vis-à-vis the dominant global economic system and over our lives? Are we happier and at home now than we were when we were bereft, undone, and supposedly needing an intervention?

The latter question is a crucial one to ask – especially as our homes rapidly take on new shapes and contours. In a sense, schooling, and the larger worldview of progress in which it is situated is part of a generational quest for flight: flight away from intimacy with the land, with context, with place and limitations, with bodies, with the community. Like Icarus in his lust for ascension, the very real effects of schooling has been to desubjectivize the world, to treat it as a realm of dead resources and commodities, to deny the agential vibrancy of the world, and to carve a concrete path of linearity from

birth to loyal citizenship and consumerism (even when the added nobility of becoming a ‘critical thinker’ is thrown into the equation). When we sit at school desks all day, we sever the particularity of the ways we commune with ancestors, with spirit, with grief, with time, with the eminence of eldership, with gratitude, and with each other. We internalize an arrogance (coupled with a deep sense of inferiority) that our grandmothers, and all those that came before them, were ‘uneducated,’ ‘primitive’ and ‘backwards.’

Our contemporary discourse of education silences and delegitimizes the idea that there are diverse cosmo-visions, diverse nature cultures, many literacies, many knowledge frameworks, and many streams other than mainstream visions of what learning, knowing and being could be. By shirking a sustained commitment to cultural diversity, schools and the educational universe they are entangled with edge out biodiversity, multiple modes of framing well-being, and life possibilities outside the dominant money system.

Schooling inculcates in us a belief that we cannot learn or be civilized without institutions to teach, assess, organize, and label us. As learners,

parents, lovers, and children, we cannot trust our own capacities or each other. Hence, fearing that we would ruin our kids or be left behind, parents comply and outsource them to a standardizing process that appeals more to an ideology of externality than to the very particular and embedded ways of seeing and hoping and yearning ‘within’ mature cultures. But our maps no longer work for understanding our territories.

The crisis is schooling. Not the fact that Indian children don’t know how to read, but the assumption that reading is critical to learning, that textual knowing trumps experience and intuition, and that not knowing how to read or write proves inferiority. Not the fact that many African people cannot afford to send their children to school, but the insistence that learning is divorced from the ordinary, from play, from indigeneity, from the world – so that we have to meet special conditions like building sterilized ‘factories’

and classrooms to teach the universal ideals of white-bearded male Caucasians. Not the observation that there aren’t more jobs or enough seats to cater to a teeming population of abandoned teens, but the material and discursive practice of denying the abundance around us to make a case for our scarcity-ridden economic and anorexic political systems.

Around the world, people are walking out in liminal fields of reclamation. They are reacquainting themselves with the polyvocality of worlds we never noticed before. They are expanding their definitions of Self. They are seeing that schooling is hardly about learning – it is about access to a very streamlined mode of being; it is part of an architecture of pre- sumptuous universality that pays lip service to the contextual difference while working hard to remove them.

This movement to the borderlands of schooling is making possible the regeneration of new learning practices that critically contest and re-imagine many key dimensions of education. A crucial aspect of this ‘recovery’ and remembrance is taking shape as a movement of self-designed learning initiatives across the world, opening space for people disenchanted with schooling to rediscover their hands, hearts, heads and homes as key un/learning tools.

Homeschoolers and unschoolers: “We can define our learning agenda.” Millions of people around the planet are choosing to say No! to the top-down cookie-cutter regime of schooling and, in the process, are shaking the establishment norms of how a student learns, what s/he should learn, why s/he should learn it, when s/he should learn it, and with whom.

There is a fundamental paradigm shift from frameworks of teaching and teacher to learning and learners; from learner as a passive recipient of content to learner as an active co-creator of meaning.

Most importantly, they are creating the space for a whole new set of generative questions to be explored with learners to re-imagine and co-create a rich field of collaborative learning: *what do you want to learn or unlearn? What problems would you like to solve in*

your neighborhood? What dreams do you have for your community? What is your idea of happiness? Who are you and how is your life and your community related to other living communities? What are the products you use every day, how are they made, where do they come from, how can you make them?

Along with these questions, the learners are reclaiming choices around where, when, how and from whom they want to learn. Learners do not just theorize about solutions to everyday crises of food, energy, waste, water, transport, construction, etc., but actually start working on them in real-life practical hands-on tinkering and prototyping projects, which they can test out and get real-time feedback about. The processes are important as the product. As such, genuine exploration of these questions requires challenging the tyranny of school timetables since learners are not restricted to the monotony of learning something in 45 minutes. The spontaneous pauses between questions where we are just free playing or doing nothing also become as important as the time engaging with the questions.

Additionally, learners within these spaces are not pressured to perform for tests, rewards or the avoidance of punishment, and can relate to, and strengthen their own intrinsic motivations. Failure is seen as a gift, as a learning experience and an invitation to decenter ourselves vis-à-vis our learning ecosystems – instead of a pathological black hole whence nothing can return.

Shikshantar, a resource center for homeschoolers and unschoolers in India, is an example of how people are working hard to reclaim self-directed learning outside of traditional school settings. Run using with democratic management systems and collective decision-making processes, Shikshantar is working to end the fragmentation between generations, and seeking to build intergenerational peer-to-peer learning spaces with at least 3 generations interacting, sharing, doing and making mistakes together.

2) Ecoverstities: “Our Learning is Entangled.”

Projects such as Swaraj University in India; ‘Unitierra’ in Mexico; Red Crow College in Alberta, Canada; the Free Home Universi-

ty, and 50 other founding organizations around the world, are conducting important experiments that are composting the hegemonic stance of contemporary higher education. Growing out of social justice and environmental movements, indigenous movements, art movements, and conscious business efforts, these people’s universities seek to disturb the exclusivity of higher education and are reimagining learners as being ‘community-ready’, instead of becoming ‘industry-ready.’

It’s a point that needs to be emphasized: nothing comes without its world. Ecoverstities are calling on people to turn to each other, to listen to the sacredness of their lands, and see themselves as part of the world (or what nature is doing). They are inviting us to pay attention to our relationships in the learning field; to unlearn and see that we are not alone as individuals, but rather we live and learn in entanglement.

They are creating new kinds of rites of passage as disruptions for young people to remind themselves how to live right relationship and harmony with life. One of such practices at Swaraj University, the ‘cycle yatra,’ invites participants to embark on a bicycle expedition over the course of several days – without the trappings and support their modern counterparts are used to. As such, participants leave their base camps without money, phones, food and event planning. They inevitably learn to trust in their neighbors, to see themselves as interdependent (or even, ‘intra-dependent’), to trust in the abundance that emerges when one is in right relationship with their ecosystems. Other ecoverstities are creating inspiring rites of passage exploring themes of love, death, conflict, and identity in collaborative ways.

What also seems shared among ecoverstities like Swaraj University are the practices that are challenging and dismantling the hierarchy of degrees, the culture of rabid competition, the ivory distance of institutionalized knowledge, and the necessity of standardized testing. One doesn’t need to be a B.Ed. or a Ph.D. to share his/her knowledge in the ecoverstities. The practices of copylefting

also sit well within these disruptive, liminal spaces of decolonizing education: by challenging the regimes of copyright and patenting, as well as the incredulous idea that we can be ‘owners’ of knowledge, we are re-situating ourselves in a world where knowledge is not a scarce commodity that can be bought if you have the exclusive resources to do so and where we are active contributors to the

learning commons. It is also worth mentioning that these ecovillages are composting disciplines by breaking down disciplinary categories and boundaries – thus leading to deeper authentic relationships, cross-pollinating conversations, and new holistic lenses of engaging the vibrancy and festivity of the world.

3) Learning cities and ecovillages: “Enchantment is never in short supply.” Eco-villages, learning cities, and transition towns are localization projects designed to reclaim power from giant corporations and the im-personal, externalizing tropes of globalism that seek to flatten difference and contexts to make the movement of profit more convenient. These initiatives are seeking to make production/consumption more intimate, governance more pedestrian, more relevant and local engagement, and learning more accessible and embedded in the ordinary. Education is seen as building an alternative politics and economics. They are inviting us to re-imagine our notions of place and context when we think about a new world of education, and reminding us that learning doesn’t only happen in the sterilized, controlled, virtual worlds of schools or Internet MOOCs. Learning cities and ecovillages break the idea of schooling as an isolated, scarcity-based funnel and recognize diverse sites of learning and knowledge as part of a vibrant learning ecosystem. Homes, offices, parks, farmers’ markets, cafés, street corners and sidewalks, old age homes, dumpsites, urban farms, and festivals become enlivened, animated and charged dimensions of our learning landscapes – instead of blank frames that propagate a disenchanting anonymity. Learning is being recast as spontaneous, dispersed, wild, unstable, promiscuous, emergent, decentralized, distributed and most importantly, embedded in the concrete walls of schooling are dismantled brick by brick.

Service learning projects and local social entrepreneurship projects are seen as rich learning entry points to engage with place and context. People are thinking differently about the commons and community and put time into evolving sharing economies, gift cultures, co-housing experiments, alternative currencies, artisan cooperatives, community-supported agriculture, and re-skilling platforms. Unplugging and spending time in the outdoors, conversing with the trees, fields, mountains, rivers, deserts, animals are also an essential part of the invitation.

Instead of trying to make more and more money, get good jobs, or pushing for more and more global economic growth, education becomes a meeting place – it becomes about meeting the universe halfway.

* * *

The call to revolutionize schooling is therefore not so much an attempt to create a new world, as it is an invitation to lean into the mystery of the world that now is, and re-engage with it. We are being called to improvise-with, become-with, learn-with, fail-with, see-with, and identify-with the world around us. The movement towards self-designed learning highlighted in this essay do not constitute final solutions or answers, but ongoing responses and a coming alive to the material promiscuity of the world. They are unfurling exercises that remind us that there are other colors in the chromatic spectrum, and that the way to these alternative spaces of power is to pay attention to those ‘negative spaces’ in the ‘current system’ (such as failure, ignorance, illiteracy, under-development, disenchantment and despair) and recognize them as allies we have not yet met.

Let us, therefore, open our eyes by shutting them tight. Only then will we notice that that which haunts us are aspects of ourselves – hints of a more ravishing series of learning paradigms – that can bring us to a more abundant world.



THE SCHETININ SCHOOL AND THE FUTURE OF EDUCATION

Axinia Samoilova

It is delightful to see how rapidly alternative education ideas are winning over the hearts and minds of progressive people worldwide. Most of the concepts however, come from western parts of the world. Little is known about pedagogical innovations in China, India or Russia. Being a Russian, based in Austria, I am happy to contribute my observations and insights into the Russian educational tradition and its recent innovations, such as The Schetinin School.

The learning principles of Schetinin are currently being adopted by a number of alternative educators; however it is essential to know the background of this great teacher, Mikhail Petrovich Schetinin, in order to understand the key to his success. I would like to, therefore, first make a short trip into the history of Russian pedagogy. Then, I will share my first-hand impressions from my own visit to a Schetinin school. In the final part of my essay I discuss my own vision of what I believe to be a dream education for future generations¹⁹.

HISTORY OF EDUCATION IN RUSSIA AND WHAT WE CAN TAKE FROM THAT TO THE FUTURE

The history of the educational tradition in Russia has many similarities with that of other countries, albeit reflecting the cor-

responding national character and mindset. Although in the early history of Russia there was no children's literature, music, book graphics etc. The overall culture of the Russian people was extremely pedagogical. The Old Russian pedagogy laid great importance on the education of moral qualities such as honesty, peace, hard work, humility, kindness, and a respect for elders. The works of Old Russian literature are profoundly moral. Morality has always been a cornerstone of education. A prominent late antique scholar Procopius of Caesarea (6 c. a.Ch.) mentioned the Slavs' typical sharp sense of collectivity, fairness and kindness and a strong belief in magic.

The adoption of Christianity in 988 instigated many changes and development in the Kievan Rus culture. The fact that the Bible was immediately translated into Old Slavonic had both a positive and negative impact on its development. The need to study Greek and Latin was not present and the interest in Western languages and culture dwindled. Moreover, there has been a lot of opposition to the Western influence since then. Even in the Church, while western clerics studied Philosophy and Aristotle's dialectics, Russian clerics believed one should not analyze God.

Another interesting peculiarity was the love of playing chess which was a popular pastime, whether for the rich or the poor. Unlike in Europe, where playing chess was a hobby of the rich. In Russia, chess was played by adults and children of all social groups. Teenagers who played chess developed mental powers, mathematical thinking and developed their concentration and self-discipline²⁰.

After the adoption of Christianity the attitude of Russians towards non-spiritual sciences became rather cautious. The development of spiritual and moral qualities like the love of the Fatherland, wisdom, faith, humility and innocence were given a higher priority than the knowledge

of "Outer sciences" prior to the 17th century. Due to the strong orthodoxy of the Russian Church in the Middle Ages the country was isolated from the progressive influence.

A lot changed when Peter the Great started his reformation and "westernisation" of the country in the 17th century. The progressive ideas of European philosophers and educators had an impact even on Russian rulers like Ekaterina the Great.

One of the most fascinating personalities that reflected the spirit of the Russian educational tradition was **Mikhail Lomonosov (1711-1765)**, one of the fathers of Russian science. Lomonosov was born as a fisherman's son in the far North of Russia but his thirst for knowledge was so great that he went by foot to Moscow to study. He obtained admission into the Slavic Greek Latin Academy in 1731. In only 5 years he completed a 12 year course, finishing at the top of his class. He ultimately received a 2 year grant to study in German universities. Upon his return to Russia in 1745, he was appointed Professor of Chemistry at the Academy itself. Lomonosov was well regarded by contemporary European scientists; he was elected honorary member of the Swedish and Bologna academies of science. Lomonosov worked persistently to upgrade the quality of Russian scientific education, and his efforts resulted in the founding, in 1755, of what is now the Moscow State University.

Having made several significant scientific discoveries, **Lomonosov viewed human nature hierarchically; the lower level: "sensual, selfish" and the "higher": spiritual and loving his country. Hence the purpose of education is the academic education of man, which leads to the understanding of the primacy of the public good over private interests.** Lomonosov, who believed in developing not just the mind, but developing an *inquisitive* mind, focused on creativity.

The ideal of bringing up a citizen who genuinely loved his country, the creator of the great Russia was very common for all Russian pedagogues of the Enlightenment period. Inspired by Rousseau, many talked about "rising up a new man", pointing out the predominance of upbringing over education. A revolutionary philosopher of that time, A.I.Radishchev defined the purpose of education as "*The formation of a person with a civil consciousness, high moral character, passionately loving their country. The task of education is to prepare a 'son of the fatherland'.*"

From the 18th century onwards the ideas of Western educators (Johann Comenius, John Locke) started penetrating and brought the division between Slavophiles and „Pro-Westerners“. Slavophilia was an intellectual movement originating in the 19th century that wanted the Russian Empire to be developed upon values and institutions derived from its early history. Slavophiles were especially opposed to the influences of Western Europe in Russia. The leading thinkers of those times emphasized the role of traditional Russian values. The revolutionary democrat N. Dobrolubov wrote: *“The truly good children’s books should reflect the holistic approach towards a human being, awaken the curiosity and strengthen his moral feelings.”*

The establishment of pedagogy as a science in Russia is linked with K. D. Ushinskii, (1824-1871) who made a connection between science and education. According to Ushinsky, the subject of education is human, so it is impossible to achieve results in education without using the results of the “anthropological sciences”: philosophy, political economy, history, literature, psychology, anatomy and physiology. Among Ushinskii’s breakthroughs was the new “Analytic-Synthetic Phonetic Method” for learning reading and writing, which is still the main method used in Russian schools.

Ushinskii’s pedagogical ideas can be summed up in a sentence: It is important to develop the love for work in a child. A teacher who is not capable of cultivating the upbringing of his pupils is a poor teacher. This leads to a problem of teachers who are only able to teach one subject since they concentrate more on that particular subject than on **upbringing, which is the primary objective. The personality of a teacher is the main factor of upbringing which cannot be substituted by books, methodology or punishment/praise. The aim of upbringing is to create a sincere personality who will love and respect people and have a kind, benevolent attitude to the world.**

Ushinskii understood pedagogy as an art incorporating the special role of a teacher: *“The art of pedagogy is unthinkable without the personality of the creator - a teacher and educator... the main thing will always depend on the personality of the teacher, standing face to*

face with the pupil; the impact of the individual tutor to the young soul of the educative power that cannot be replaced. No textbooks or moral maxims, no system of punishments and rewards”.

In the second half of the 19th century, the central idea of Russian philosophy and education was “narodnost” (love and dedication to Motherland) which was placed above all. The aim of education was to raise a “holistically developed personality“.

At the same time Europe and USA were enchanted by the new educational trend: Progressive Education. Usually the names associated with that movement are Maria Montessori, Rudolf Steiner, John Dewey and A.S Neill. Little is known about the first progressive educator-practitioner, the greatest Russian writer **Leo Tolstoy (1828-1910)**. Apart from his well-known novels he wrote excellent schoolbooks and founded his own school based on progressive ideas of freedom for both teachers and pupils. In fact, his school in Yasnya Polyana was a direct forerunner to A.S. Neill’s Summerhill School. One of his main theses, that the school should always remain a kind of pedagogical laboratory to keep it from falling behind universal progress, has found wide acceptance as an educational premise.

Tolstoy’s views and practices were not easily accepted, yet he exercised a profound influence on the course of elementary education in Russia. He developed unique methods of teaching the alphabet and reading, insisting on self-reliance by obliging students to undertake manual labor, and believed that a child should be allowed as much freedom as possible in the classroom. These features of his system have had their influence in later Progressive Education²¹.

Leo Tolstoy believed that education should lead to the individual development of a human being – and that of the whole society – towards the Common Good. He believed that freedom as such is a necessary condition for that. However in order not to create chaos out of freedom, education needs a solid base, which should be true religion and morality. Tolstoy stressed on the unity of education and upbringing (*“The most important thing is the living word of a teacher”*).

Under the influence of Western educational thought at the end of the 19th century and the beginning of the 20th the idea of respecting the personality of a child, their motivations and interests, took a key position among Russian educators. The requirement for a teacher was to have a broad educational background, pedagogic freedom, deep knowledge of his subject and methodology as well as respect and love for children.

One of the most interesting educators of that time was a teacher, anatomist, physician and social reformer **Peter Lesgaft (1837-1909)** who founded the modern system of physical education. Lesgaft introduced a method of bridging mental and physical education by the explanation of exercises using words, rather than simply 'showing', which develops language skills and imagination.

Another important figure in the history of Russian education was **Stanislav Shatskii (1878-1934)**, a humanistic educator, writer, and educational administrator in the late Russian Empire and the early Soviet Union. He sought to build a liberal, child-centered version of communist education that drew on John Dewey's activity-based educational methods as well as Lev Tolstoy's focus on an aesthetically based, free education. Placing these ideas in a Marxist framework, Shatskii hoped that a communist education – founded on the principles of cooperation and self-motivation – would release the child's innate potential and help him develop into a well-rounded human being. His ideal student was a child that appreciated art, culture, and music, yet also knew the value of a hard day's work: "*A child of high culture with callused hands*".

In the Soviet Union the basic tenets of the Marxist doctrine of upbringing were developed and defined by Lenin, who stated that in a socialist society, the younger generation should be inculcated with a materialist worldview, communist convictions, and high moral qualities. The means for achieving this goal are a broad scientific education on a polytechnic base, the linking of instruction with productive work, and the participation of young people in the work of building a new society²².

ANTON MAKARENKO

The most remarkable educator of early Soviet Union was social educator Anton Makarenko (1888-1939), whose work is particularly interesting in relevance to the Schetinin School (to be explained later). Based on his unique experience, Makarenko developed a multifaceted theory of school education, helping orphans under the most difficult and dramatic conditions. In the upbringing of the troubled orphans he combined insistence and respect, school education and productive labor.

In 1920 Makarenko became director of a new Colony for homeless and delinquent youth in Poltava, Ukraine. World War 1 and the civil war led to large numbers of orphans and the children in the Colony were highly traumatized orphans who had previously lived by begging, theft, robbery, or prostitution.

What fascinates me personally is that, within several years, **Makarenko developed a system which transformed those children into happy, stable, honest and bright personalities**. Interestingly, in his colony of 600 juveniles Makarenko completely abandoned teachers and supervisors. They had adults as school teachers, engineers at the plant, but the children's group of 500-600 people lived to some degree on its own. Makarenko had complete trust in his children, he knew that they would rise in the morning, get ready and clean their rooms. Not a single case of criminality developed in over 3000 children who went through Makarenko's amazing educational system and many researchers who followed the destinies of these children noted, "They became happy people". Just as a comparison: Today only 10% of the graduates from Russian state orphanages adapt to life; 40% commit crimes, another 40% of graduates become alcoholics/drug addicts, and 10% commit suicide.

WHAT WAS MAKARENKO'S SECRET?

As far as I can conclude, from studying Makarenko's work, these three major points encapsulate his philosophy:

- » **The absolute faith in the goodness of children and an unconditional love for them.** When a new juvenile was brought to the colony, Makarenko never took his “case” which described his biography and crimes. “*We don’t want to know anything bad about you. A new life starts for you now*” – he would say.
- » **The absolute faith in the power of educational work:** “*I believe in the infinite... confidence in the unlimited power of the educational work... I do not know of any case where a full-fledged character appeared without a healthy educational environment, or, conversely, when a warped character came out in spite of the correct pedagogical work.*” A. Makarenko.
- » **The framing and organizational setup of the school,** based on collective upbringing, business and valuable work and freedom of self-management.

The Makarenko’s Colony was organized in an unusual manner. The juveniles were divided into detachments consisting of ten to twelve people. Each detachment was headed by one of the juveniles chosen by his or her peers. These leaders were named commanders. The commanders attended a council that made decisions on important matters. Some decisions were taken at a general meeting where all the inmates could meet. Even though Makarenko was the director of the colony, he had to act in accordance with the decisions made at these meetings. Through this system the juveniles became genuinely interested in the general running of the colony. The use of military terms like ‘commander’ and ‘detachment’ were associated with the revolutionary struggle and therefore had positive connotations for the juveniles²³.

According to Makarenko discipline is not a means or method of education, but its result. That means that a well-brought up person has inner discipline as a moral category.

In the summer of 1928, a prominent Russian writer Maxim Gorky came and stayed a few days. Afterwards he described Maka-

renko in high terms: “*The organizer and man in charge of this colony is Anton Makarenko, undoubtedly a great teacher. The boys and girls in the colony clearly love him and talk about him in tones of such pride as if they themselves had created him*”²⁴.

Based on pedagogic literature and his own research and experience, Makarenko believed that **upbringing and proper education were the most important factors influencing the formation and development of an individual.** His point of view contrasted with the practical standards of the times. At the beginning of the 20th century, the majority of teachers believed each individual had a number of congenital characteristics that determined his or her personality. Makarenko did not agree that a person is “initially good” or “initially bad.” He was sure that everyone, especially children and teenagers, needed respect and understanding. Makarenko also rejected physical punishment, a common measure in his time.

Makarenko believed in freedom of choice. To give children such freedom, he would include at least one option that would definitely not be picked by the child. This method proved to be very successful²⁵.

According to Maslow, if basic needs are not fulfilled, people will not even think about fulfilling more advanced needs. It was that reasoning that led Makarenko to reject food deprivation as punishment. He would not leave children without dinner, as others often suggested; he would always feed children before having any serious conversation with them. He also made sure that other basic needs were fulfilled and that children felt safe by ensuring that older ones were watching over the younger ones. He showed affection for the children, emphasizing that the Colony was their family. He made them feel worthy by assigning duties to them and praising them for successfully completing tasks. He was convinced that to truly love and respect a person one must set high expectations. But only when the basic needs, the need for safety, the need for love, and the need for self-esteem are fulfilled, could he expect his youngsters to aim for self-actualization²⁶.

The following structural and pedagogical arrangements seem to have made Makarenko's Colony work and deliver the most amazing educational results.

Business. The colonists had a business which fed and disciplined them. Initially, they established farming just to feed themselves, and later engaged in serious production. Having built a technical plant in less than a year, students began to produce electric drills, and later mastered the production of a photo camera, "Leica". The camera "Leica" consisted of 300 parts produced parts up to a precision of 0.001mm in size – for those times it was a considerable innovation. Production on the Colony was not simply cost-effective but highly profitable: the commune declared to the state a profit of 4.5 million Rubles a year. Pupils were paid; the money was used for their personal needs and those of the younger children in the commune. Former colonists got scholarships for studying at universities. Money was saved and assigned to the children for later lives after leaving the Colony. A considerable amount was accumulated for the common needs. The Colony maintained an orchestra, a theatre, a flower greenhouse, organized trips and other cultural events. The main point here being that all this formed their identity: by 16-19 years of age, children became the masters and chiefs of production.

The Core of Collective. Colonists were educated by a core team of elder colonists who had a decisive impact on the younger ones. Respected colonists who already imbibed the values of the Colony, naturally built the core of the team and thus served as "leaven" that permeated the newly arrived colonists and made them part of the system. Children introduced each other to the new rules of life in their own language. Multi-age groups were another integration tool.

Self-management. According to Makarenko, if both the real business and a healthy core of the collective are not there, self-management is impossible and even harmful. If the base of the collective is sane, self-management would strengthen and polish

it, becoming a school of leadership and management. Makarenko developed a highly interesting system of teamwork which makes everyone a leader and manager on a rotational basis, for more details see Makarenko's novel "The Pedagogical Poem".

Physical framing. Makarenko implemented and observed the following rules and rituals that behaviorally, through the physical body of the colonists, adjusted them to the new rules of life: Getting up in time to wash, mopping the floor, not spitting on the floor etc. – these things became natural and normal for previously abandoned beggars, thieves, robbers or child-prostitutes. The physical training and regular marching gave them a straight and sturdy posture which, according to Makarenko, provided something essential to the inner core of a personality.

While reading the works of Makarenko, it is crucial to remember the unique socio-political situation he lived in and that those pupils were actually juvenile delinquents.

Makarenko felt that society, the collective as it was called, was of the utmost importance. He rejected the idea that society was a crushing mechanism that necessarily strips each member of their individual identity. However, he also did not believe in blindly following the higher authorities that controlled that society. And even though he believed that collectivism is a major component of a healthy society, he also saw self-governance as an essential part of collectivism. He thought everyone should have a say. Makarenko also recognized and praised individualism in every student and he knew each one's strengths and weaknesses. These departures from the Communist party line eventually cost him his job²⁷.

Many of Makarenko's ideas popped up in the works of educators, researchers and psychologists in the West decades later. Just to name a few: Erving Goffman (1963), Donald Winnicott (1965), Robert Rosenthal and Lenore Jacobson (1968), Thomas Szasz (1974), Albert Bandura (1977), Heinz Kohut (1977), John Bowlby (2005).

In Japan his works are considered a must-read for managers. Practically all Japanese companies are based on the patterns of

Makarenko's Colony. In the last decades his system has returned to Russia as foreign methods of "brainstorming", "teamwork", "team-building", "improving employee motivation" – all that was already there in the 1920 and 1930s.

In 1988 UNESCO nominated Anton Makarenko as one of the four greatest educators of the 20th century, together with Maria Montessori, George Kerschensteiner and John Dewey. Unfortunately, Makarenko's precious heritage is ignored by most educational professionals in the Western countries.

Let us sum it up: is there something that we can call a *Russian educational tradition*? Obviously some main principles come up throughout history: Upbringing is the basis of education and should play a primary role

- » A teacher is crucially important. A broadly educated, loving and respected teacher serves as an inspiring example for children.
- » Idealistic upbringing – morality, kindness and striving for the Common Good
- » Collectivity – a collective is regarded as the best place for individual growth
- » A deep love and dedication to the home country

When I recently met today's most prominent (and amazing) Russian educator Mikhail Petrovich Schetinin, I realized how much he imbibed all of that. I would even call him an archetypical Russian Educator!

Despite the permanent unpopularity of Russia in the West, I believe there are some things that can be learnt from its great pedagogical traditions and experiences. What I have been observing in the last 18 years of my life in Europe is the lack of respect and understanding of a teacher's role. Especially in terms of Progressive Education, the discussion is centered on a child who becomes 'the center of the Universe,' but a teacher, as an inspiring and guiding

personality, is absent from this discussion. Is this a truly balanced view of the educational and upbringing process?

Let me provide you with a short example of an experience from my own school days. As a child, I was a passionate self-learner and a system fighter. I grew up in the Soviet Union and the system was too limiting for me. Only decades later I realized how much valuable input I had imbibed from my Soviet school education and Russian upbringing traditions. My grades were good but not excellent. However, as a self-learner, I took keen interest in subjects which were far beyond the generally intense school program. I taught myself reading and writing in Old Slavonic and explored Astronomy, did my own monitoring of newspapers on various topics, studied History of Arts without any external help – all that by the age of 12, and without the Internet. In my teenage years I fell in love with philosophy (which was not in the curriculum), and at age 15 I found myself writing philosophical treatises. I was a fully self-sufficient and happy person, although somewhat disconnected from the peer group. But even being my own teacher, I still dreamt of having someone to show me the way. In the late school years, some school teachers became my best friends.

They loved to invite me to their homes and spent time with me because I showed genuine interest in learning beyond the curriculum.

What about those who are not self-learners? They probably need even more guidance and inspiring examples. The family should play a role here, but not every parent is able to serve as an inspiration. I am deeply convinced that this is a teacher's role. Otherwise the Media or 'Social Media' will pick up this role and then... you know what happens. As one Russian proverb goes: "The holy place cannot remain empty".

Another typical Russian educational feature which fascinates me is the idealism and orientation centered on the Common Good. The values of Western educational thought are traditionally more individualistic and, when pursued passionately, tend to bring up self-centered personalities. When a child knows that

the purpose of education is to get a good job and a better life for himself/herself, this is one thing. When a child knows that he or she, beyond their own good life, can be a valuable contribution to the betterment of humanity, it is a totally different motivation giving special meaning to life and it inspires studying.

There is something else I find extremely important in the Russian approach to Education; however, the scope of this article does not allow me to explore the topic. Let me just name it: **The Systems Thinking**. This is what made it possible for the Soviet Union to build up its industries and science within 2-3 decades after a generally very poor state of education following the October Revolution. The USA discovered this approach to learning in the 1960s, and in Europe it is being discovered recently. The Systems Thinking is not a subject, but a methodological approach which runs through the curriculum. It enables a deeper understanding of any subject, as well as seeing the interconnectedness of life phenomenon. It develops a sharp mind and teaches how to learn quickly and thoroughly.

THE SCHETININ SCHOOL IN TEKOS, RUSSIA

The name "Schetinin School" is becoming popular among modern western educators, especially in the German speaking part of Europe. The online information about this outstanding school is very limited. I was lucky enough to have visited the School in July 2015 and I'm thrilled to be able to provide some first-hand information, as well as an analysis and the historical background, of this highly interesting educational institution.

The founder of the school is an academician of the Russian Academy of Education, Mikhail Petrovich Schetinin, one of the most remarkable teachers and educational visionaries of our times.

Mikhail Petrovich Schetinin was born in 1944 in the South of Russia and acquired his pedagogical education as a music teacher (he studied the accordion). When he started teaching he was keen on understanding the genius's nature. How do you preserve genius in a

child? His observation showed him the need for a holistic approach in education, which involves using the left and right brain halves to the same extent. Schetinin started his first pedagogical experiments in 1974 when he became a director of a school-complex which combined secondary school with music, sport, and dance/art school. However this and two following school experiments failed – they were closed by the authorities for various reasons, mostly for its alternative nature compared to the System. It was only the last school experiment in Tekos, at the very South of Russia on the Black Sea shore, (started in 1994) that worked out as a true success story – an outspoken example of an alternative holistic approach to schooling.

The school in Tekos exists since 1994 and is impressive due to both its educational and holistic developmental results. Entering the school at 12, a child is able to finish the curriculum of the Russian secondary education (which is more difficult than most western curriculums) within one or two years, acquiring a diploma of one or two higher educations by the age of 18. At the same time one becomes certified in two disciplines such as a cook or builder as well as a set of other professional skills like painting, dancing, martial arts, even beekeeping. But on top of that – and what is definitely more important and interesting – a child grows into a stable, beautiful personality, broadly educated not only intellectually, but at heart. The core idea of Schetinin's method is not about raising prodigies, but about raising beautiful human beings, fully developed mentally, physically and spiritually. The children in the Tekos School become loving, caring, giving; they are collective and responsible, strong and clear about their ideals and goals. A child becomes a personality who perceives himself/herself as part of the whole, not only responsible for, but actually capable of contributing to the betterment of humanity. Isn't this the type of people we desperately need today when the world seems to be falling apart in ecological, economical and socio-political terms? Schetinin dreamed of creating "The School of the Third Millennium" and it turned out to be an excellent model of what the world needs in the highly demanding times we live in.

WHAT IS THE SCHETININ'S SECRET THEN?

Mikhail Petrovich discovered his “secret” already in the first years of teaching. His – at that time, musical – students showed amazing results, and when asked “How do you work on the music pieces?” he answered “**We work on the human being**”. This statement encapsulates the key tenets of the Russian educational tradition i.e. upbringing, working with the soul of a child is the primary aim of education. The success in studies follows automatically.

The structural organization and some tools of working with the groups/collectives Schetinin borrowed from Anton Makarenko, such as: mixed-ages groups producing some material or educational results/products, or collective discussions about the results/feelings/perception of oneself and others at the end of the day. Similar to Makarenko's Colony, the Tekos School has groups of 5-6 people, with their senior leader reporting to the council. The seniors are former pupils who are now 18-25 years old, having one pedagogical and one other higher education qualification. They grew up on high ideals inspired by Schetinin and thus serve as mature, natural authority models for the younger ones.

Each group chooses one educational subject or educational field as being central for its members – it can be mathematics, chemistry, biology, and history etc. The learning group may extend the initiative to expand the educational field, or to create an entirely new field for the school, for instance oceanography. The work involves several levels of pupil's activity:

- » I study (studying subjects).
- » I'm learning how to teach (knowledge and comprehension of the teaching methods).
- » I teach (mutual teaching of students).
- » I teach teaching (the transmission level – teaching methods).

This is another key principle which is the turning point in learning: children know that they learn not only for themselves,

but also for others. Initially there is this collaborative, collective feeling of being connected and the need to pass the knowledge on. It is an entirely different motivation and access to learning. In my opinion, this is what makes it especially effective.

“We do not have students as such. Everyone is a teacher or expert. Students actually create manuals and tutorials. These textbooks we use as system for development of the kids themselves, because in the future Russian school textbooks will be done by the students. Thus everyone is a researcher at our school. We pay special attention to stories, folk dance, folk singing, folk crafts and folk Russian martial art which is not based on aggression, but on love “. M. Schetinin²⁸.

Regarding educational innovation many teachers find these two main techniques developed by Schetinin and his pupils interesting and useful: **Systemic picture/Schemata**. The method is not entirely new; it has been variably introduced and used by several Russian (and probably world) educators. In fact, already in the 17th century an author of an arithmetic schoolbook made a systemic picture of Mathematics. The method should not be misunderstood as a mind-map. A systemic picture is not only a snap of a topic or entire subject, but it serves as a tool for others to understand and memorize the knowledge at its fastest and most effective.

- » “**The immersion method**” as Schetinin names it (not to be confused with the popular “language immersion method”): A studying of one subject intensely within a short period, normally week-wise. Any subject like mathematics or history can be studied a whole week long, letting the children touch the depth of it through immersion. However it is important to remember to mix up the right and left brain halves – the one-subject-classes should be interrupted by physical or artistic activities like sports, music, choreography, or painting. Since the method of Systemic pictures/Schematas has been well developed throughout the years at Tekos School, the pupils can normally cover the entire subject's program within one week.

Schetinin himself, however, warns against idealizing any methodology: “No program, no methodology can in and of itself guarantee success in child-raising on the whole... The methodology we use is not the main thing, not the method, but the meaning, the purpose we aim through it. It means that we can change the method, but it is important that the meaning/purpose path line will not deviate.” And the Meaning, according to Mikhail Petrovich is the harmonious human being contributing to the beauty and sustainability of the World.

“...Years are behind us now. I have held onto the conviction that Man can do everything! It is precisely through making sense of this saying that our multifunctional school, the whole school complex, the whole school-Man, has been developed. Our purpose is not ‘knowledge-know-how-habits.’ It is not endless drilling and rote-learning, or the spoon-feeding of information. Rather, it is the raising of Man to live harmoniously, to act in harmony with society – a Man who, when he sees and analyses the phenomena of life which surround him, can feel their inter-connection, can perceive the world as a whole. And no matter what he becomes – an engineer, physicist, chemist, builder, teacher, etc. – he will understand that he is going out into a whole, complete, unified world!” M. Schetinin

Three principals seem to build the base of Mikhail Schetinin’s educational philosophy:

» **A school is not a preparation for life. A school is a life itself!**

We are being taught that during our years at school we should ‘prepare’ for life, then we go to high school and study, where we also ‘prepare’ for life, and then finally the life begins – what an absurd idea. Many people reflect that school was the darkest part of their lives – probably it was no life at all?

Schetinin believes that we can and should make every school day a life experience, where a child is actively involved in meaningful activities (gardening, building, painting, cooking, cleaning, dancing, beekeeping, etc.). The joy of creating real things and providing real help is the most uplifting.

“In our world today the whole educational curriculum is divided up into divergent layers, isolated from each other. The world of perception is transformed into isolated ‘corridors’ to such an extent that it is sometimes hard for the pupil to believe that they are all part and parcel of a single whole. Art draws its very strength from the fact that it synthesizes fractionalized phenomena, offers a holistic system of education and child-raising, and inculcates a holistic world-view... But art cannot fully address this question if children are not immersed in an atmosphere where genuine life-values are affirmed – an atmosphere of shared labour and searching, where every lesson is permeated with a sense of creativity.” M. Schetinin

» **Knowing each and every child. Investing love and faith into each one of them.** Schetinin knows and understands all his students deeply and thoroughly. He loves them tremendously, and this is felt every minute. There is no need to say how much the students love and respect him. Mutual love and respect create the basis for the

flourishing cooperation. Being himself an outstanding personality, Schetinin sets up high pedagogical standards: “*The potentiating of Kindness to the Absolute is our job as teachers.*”

» **Every child should know the meaning of its life, understand its roots and see the goal in the future.** And the goal for Schetinin is nothing less than the Common Good, the well-being of his Motherland and the transformation of the whole world. He sets up very high goals for the children, but this is what inspires them, and they are imbibing this philosophy gratefully. The best examples in human history show us that people, guided by high ideals and goals, work wonders and bring about a real betterment for the human race. Now let’s honestly ask ourselves what goals we set up for our children.

“*We have to understand the world, we have to comprehend it and here is our job/duty. When we comprehend, when we understand what happens, when we act for the good of everything – that is our job/duty.*”

This job is ceaseless, and when a teacher himself lives and works this way, this is what children need from him. He is not just a storyteller; he is a doer... In our educational process, we work by a three-part harmony: "I see – I analyze – I act." M. Schetinina

As a result of such a wise philosophy on upbringing, the school's graduates have one fantastic ability: they are always looking for the best solution, for the enhancement of anything they touch with their hands or attention. Recently some children were passing their final exams in law school, and, after providing all their answers, they offered an actual improvement in the relevant law under every exam question – to the astonishment of the examiners. Currently, the whole school is working on a 'Universal Teacher' project. In cooperation with one Russian pedagogic High School, they developed a curriculum for a universal secondary school teacher who would be able to teach all the subjects (for instance, for village schools).

The methods which Mikhail Petrovich uses are traditional and non-innovative but have probably been forgotten by modern educators. He inspires children through everyday storytelling (everything from fairy-tales to legends, stories of war heroes and people saving the lives of others, as well as his personal experiences). It is remarkable that the greatest ideals which children look up to as role models are actual heroes and saints, people who act benevolently for their fellow man. Let me give you some more details and impressions I gained from visiting the Tekos School.

- » The day starts at 5.30 a.m. and ends at 9 p.m. In-between they study, build houses, engage in artistic painting and handicrafts, sing a cappella in eight voices, do martial arts and folk dancing with professional skill, cook their meals, do administrative work and write their own textbooks. In the evening they always take one hour to reflect on the day and their relationships with each other and with the world.
- » All the school facilities including study spaces, an auditorium, administrative office, cooking area, dining room, toilets, show-

er rooms, boarding rooms and other facilities are designed and built by the students. All these building works are full of grace and beauty reflecting the inner nature and outer skills of the students and the excellent quality of the school activities. *"It is not just that we place our tremendous emphasis on music, visual art, and dance – these activities should make themselves felt in the school on a day-by-day basis, and this is the crux of the whole thing." M. Schetinina*

- » Once a week they take politics as a subject where they watch the important news and analyze and discuss all that is happening in the world.
- » Children do have 'smartphones' at school, which they use for accessing information quickly on the subjects they are working on. For TV and games, there is neither a desire nor time.
- » All the students have an amazingly straight and dignified posture and impress everyone with their beautiful Russian language. Their way of communicating with each other and school guests is admirable; it is full of friendliness and respect in a way one rarely finds in modern teenagers. They are attentive and caring.
- » The methodology of learning would require another article; it's a fascinating and huge topic. I can only note that the core principles are Systematization and Integration of all subjects. A pupil learns how to imbibe the essence of a subject, how to find the interconnections with other subjects and how to see the world as a complex interdependent System. They learn how to discover the macrocosm in the microcosm; they learn how to see the Oneness.
- » Another thing which is striking is the combination of discipline and flexibility – to an extent, I have never experienced anywhere.
- » Dress code: The girls choose themselves not to wear short skirts or cosmetics. Knee-long-skirts and dresses are the standard female wear. No jeans, and sport trousers only

for sports. Boys mostly wear shirts and trousers and military-style apparel for martial arts.

- » The children are keen on studying (and at any time of the day!) I gave some German classes at 7 p.m. and their attention and their interest was still fresh (keeping in mind they get up at 5.30 a.m.)
- » Even though they deliver such amazing results, the children remain very humble.
- » The boarding school is under the jurisdiction of the Russian Federation's Ministry of Education. It charges no tuition fees. And, even though the school does not advertise itself, it has no vacancies.
- » There are students at the school from over 40 nations and different religious backgrounds.

Remembering the words of K. Ushinskii about pedagogy being an art, I think of Makarenko, Schetinin and other great teachers who could never be replicated because of their truly artistic approach to children's hearts and minds. Pedagogy is an art, the greatest of all arts, and even by knowing all the secrets of the grand masters we cannot copy-and-paste their work – we can only get inspired by them. So do I – inspired by these and other great pedagogical examples – feel the urge to contribute to the global paradigmatic change in education.

The world history of education teaches us that striving for the most suitable educational approach is a perennial desire. However, today it seems we are in a unique situation. For the first time in human history, the global educational community is searching for a transformation of the system. So far countries have been developing their systems according to their national and political interests. Since the world has become a global village, we encounter each other much more closely, and we understand the need for

a common approach. I firmly believe that despite all the current troubles, mankind is heading towards the global unity of values and aspirations. Why don't we take the best of all cultural, educational experiences and combine them in such a way, that our children can be educated in a truly integrative and holistic manner?

THE FUTURE OF EDUCATION WHICH HAS ALREADY STARTED

When we look at the current problems, and developments humanity faces like terrorism, increasing inequality, climate change, fundamentalism, global citizenship, the rise of the creative class, innovations and culture wars – what is the first impulse of a loving parent or teacher? To equip children with skills, knowledge, and wisdom not only to survive in that complicated transition period but also to take part in its transformation. We need a new generation of morally sophisticated, psychically stable and healthy personalities that can lead the society out of the mess that mankind finds itself in now.

My vision of schooling – in regards to this mammoth task – is the combination of upbringing (ethical, idealistic, spiritual), high intellectual development and education of the heart in connection with arts and nature. These components are compartmentalized in modern education systems. Classical schooling concentrates on intellectual development, overrating mathematical and linguistical intelligence. Progressive Education is more concerned with Emotional Intelligence and Spirituality. Why cannot we have all of them integrated together? We can, and the example of the Schetinin school brilliantly shows us why this is possible.

RESTORING THE IMPORTANCE OF A TEACHER

Another key point to mention is the modern fascination with digital media and a belief that by using the Internet and new tech-

nologies children can learn much easier and faster. I believe in that too. I would like, however, to warn against overlooking the educator's role. A school is not only a place for knowledge-transfer, but it is also so much more. The social and psychological role of a school in general and a teacher, in particular, is often underestimated. The closer we look at mankind's history, it provides us with a stunning insight into the inter-connectedness of human history with the history of education in all parts of the world. For instance, Christianity, spread by a word and a sword, established itself so well mostly because of its educational system that it introduced in the less developed countries. Another great illustration is China, with its highly conservative education system, based on Confucius' morality teachings that transformed the country into one of the oldest, and great-

est, world civilizations. Another ancient civilization, India, had no centralized school system. Instead, the schools were held privately at Gurus' dwellings. Interestingly, both China and India had educational systems based on a very strong teacher's' role.

The tandem Guru-Disciple (a master and his apprentice, a teacher and his student, a mentor, and his trainee) is one of the most deeply rooted Archetypes in the collective consciousness. If suppressed, as it seems to be currently, particularly in the Western culture, it leads to a situation where teachers cannot teach and children that cannot learn from them. The knowledge transfer is only one aspect of the relationship between a teacher and a student. The other aspect is the transfer of moral goodness and ethics; this is what none of the digital technologies can do. This kind of educator standard will require, of course, teacher personalities of that caliber, teachers who believe in themselves and their students.

MY IDEA FOR THE FUTURE OF SCHOOLING

I would love to contribute my personal vision of the future of education, based on my vast range of studies and experiences: a

university degree in linguistics, pedagogy and intercultural communication, I am a certified practical psychologist, spent a childhood growing up in the Soviet Union, am Russian by origin and have been living in Western Europe for 18 years, I have 10 years of experience as a Human Resources Manager, a keen interest in Middle Eastern, Indian and Chinese cultures and 20 years of meditation practice and social activism. A combination of all that learning and experience provides me with a unique perspective on what the world is heading into, and what kind of education our children may need.

My dream school would educate children of great minds and hearts: An intellectual brilliance and sharp penetration into every subject would be balanced with high awareness for the Common Good, with the striving to contribute to the betterment of humanity, with love and compassion. I would like to create the conditions that will cultivate and bring up talented idealists, well-equipped for the modern world and a readiness to make it better. I would like to see students coming out of such a school as strong and happy personalities, collectively conscious and successful in the real sense of it.

My vision of a future primary and secondary education includes the following set of subjects/tools/approaches: Global Learning, Collective

Learning, Systems Thinking, at least 2 foreign languages, Artistic Education, Nature awareness, World Ethics, Meditation, Useful Work and Education of The Heart.

The standard set of common curriculum subjects like a native language, mathematics, sciences, history, and literature builds a natural knowledge base.

Global Learning is a relatively new pedagogical discipline concerned with exploring the interconnections between people and places around the world. It allows children to observe the similarities and differences that exist around our world today and relate these to their lives. Global Education is not a subject, but a dimension that runs through the curriculum, an extra filter to help children make

sense of all the information and opinions the world is throwing at them. It combines methodology, active and experiential discussion based activities, a caring, cooperative and open outlook on the classroom experience, and core concerns finding out about all cultures, about the causes of poverty, inequality, and environment.

Systems thinking is a discipline that concerns an understanding of a system by examining the linkages and interactions between the components that comprise the entirety of that defined system; based on the System Theory. Systems thinking isn't just about the tools to help children see the world through a better lens; it also can give them a greater grasp of why things happen a certain way. Things are circular in systems thinking, and recognizing the complex nature of cause-and-effect relationships can help understand why things happen. It is a crucial skill with today's complexity and highly helpful in learning about any subject (The learning through System pictures in the Tekos School described earlier shows its high effectiveness).

Collective Learning understands that any learning is a collective process. As we know from the neuroscience, a human brain does not exist in singularity. A brain can only develop itself as a part of other brain networks. The understanding of connectedness and interdependence is vital for modern people. It brings learning to an entirely different level and quality. Some tools like collective working on Systemic Pictures (Schetinin method) make it even more vibrant.

Artistic Education means both teaching children to create real objects of art by skillful painting, handcrafts, engaging in artistic performances like dancing and singing and at the same time inspiring them to

appreciate the culture and understanding the aesthetics.

Nature Awareness brings back our connection to nature. As modern people, we perceive nature as something outside of our being. This leads to, at the end of the day, human-made ecological disasters. Nature education includes a wide range of tools from

discussions to wilderness survival skills and it connects children to nature, community and themselves.

World Ethics builds up an understanding of religions and cultures today which is, more than ever, crucial today. Knowledge and respect for all religions and teachings of great spiritual masters and philosophers is an educational must-have. World Ethics makes children aware of connectedness and lays a solid spiritual foundation for their personal development. World Ethics is a religiously neutral subject.

Meditation will become a part of the curriculum in the future similar to sports because of its obvious benefits for studies and wellbeing. Countless meditation studies worldwide deliver much proof of that. Apart from the generally known benefits like better attention, less stress, balanced mood, meditation provides a very special impact on learning. A short meditation after some intensive learning provides a similar impact on the brain as deep sleep, similar to the "compressing" of the new information by computer.

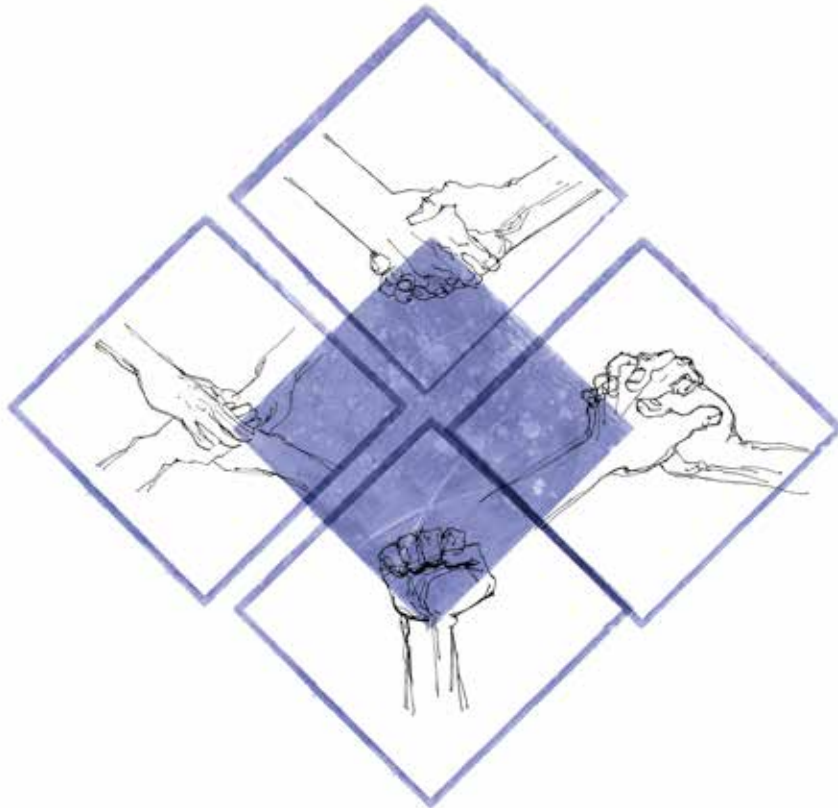
Useful Work understands the purpose and value of any work. Some physical or intellectual creative work done for others and for the sake of the Common Good allows children to remain sensitive, attentive and generous personalities and obviously contributes to a better future for the whole world.

Education of the Heart is a beautiful paraphrase of Emotional Intelligence. Because of the rapid changes in the economic, social and political environment which we observe today, (and we will face an even larger transformation tomorrow), the next generation will survive only when people learn to cooperate, to love and to care for each other. These and other universally valued human qualities could and should be sustained and strengthened in children.

CHANGEMAKER EDUCATION

EMPATHY AND CHANGEMAKING FOR THE FUTURE*

Flávio Bassi



I started out my path as a popular educator by working alongside indigenous people and communities in Brazil, such as *caiçara* and *quilombola* communities. Some time, over ten years ago, when I worked in a *quilombola* community in the *Vale do Ribeira* area, in the deep south of the São Paulo state, I came across a young girl's remark, which echoes to this very day. The *quilombola* communities in the area were to welcome their first public school, and it would uphold a specific curriculum and work through different practices, designed to respond to their yearnings and their way of thinking and living. Her name was *Maria Chules Princesa*, a local elderly woman who was admired and feared for her strength and courage. Community leaders, allies from civil society and public administrators, discussed intensely over the plans for the new school, but we noticed *quilombola* children and adolescents were not being heard, excluded from the entire process. Hence, we decided to promote a workshop with them, so they could say what they wanted for their future school. What would a truly *quilombola* education be? What school would they feel welcomed in?

* Originally published as "Territórios Educativos e Transformação Social", at Teresa Cunha and Boaventura De Sousa Santos (ed.), International Colloquium Epistemologies of the South: South-South, South-North and North-South Global Learnings - Proceedings. Coimbra: Centro de Estudos Sociais

Or maybe at home? Which one could they identify with? We asked this series of warming up questions but got back very little engagement. At which point we asked bluntly: how would you like your school to be? After a long pause, 13-year-old Geisiane broke the silence: “Flávio, don’t make us dream,” she said in a resigned intonation.

After many years, I came to realize that Geisiane’s reply not only indicated feelings of impotence and hopelessness, which we mostly shared at the time, but also contained in it a warning. If she chose not to share her thoughts because of fear that they would once again be ignored, and her expectations frustrated, her request also implied she *did* have dreams. It felt as if she was saying that the problem wasn’t in her; she was ready, full of power and will, but the world around her wasn’t ready to welcome it. From this moment on, I gradually became aware that children and teenagers are already change-making forces. They already have in themselves all the “wants” and “dos” in the world and we – adults, communities, schools, governments – aren’t ready for it. How would it be possible to create their school, for them, without regaining this interest and trust in the world, in a capacity for dreaming?

Since then, I have met many Geisianes, and piled on accounts of the divorce between formal education, institutions, social relations, and the transformative potential every child and teenager carries within themselves. And thus, also grew my conviction that it is no longer possible today to think about the future of education without taking into account this big incongruity. For this reason, instead of multiplying pedagogies and casually electing new methodological approaches, we should rethink the entire endeavor, redefining the very terms on which the conversation is founded, walking towards a new paradigm with models and arrangements capable of forming empathetic and change-making children and adolescents. Isn’t that the very essence of education? To educate for the positive transformation of oneself and the world? This is never going out of fashion because the change-making agent is at the very core of human nature itself.

In 2012, after a rather long path in Ashoka – the world social organization that laid ground for social entrepreneurship 35 years ago, and

now gathers over 3300 social innovators from 86 different countries – I was gifted with the opportunity to implement this vision, by leading their worldwide program *Changemaker Schools*, first in Africa and now in Latin America. *Changemaker Schools* is a global community of teams of basic schools that prioritize empathy, teamwork, creativity, shared leadership and changemaking as values and key skills in the formation of their students. These schools are leading a transformation in education by taking in and raising these children and teenagers as changemakers – subjects who possess the skills, competences, and purpose to allow them to generate ideas and take the initiative to solve social issues and influence positive change in the world. This set of competences is a selection based on a detailed study of strategies and approaches of over 700 Akosha network social innovators who set for themselves the same challenges. By selecting this set of skills as key to wrestling the challenges posed to us by our times, we do not intend to suggest that these are the only competences required to promote a change-making education; they are a starting point on the way to the formation of active, empathetic changemakers of the world.

CHANGEMAKING SKILLS²⁹

To participate in the world, it is necessary, firstly, to take an interest in it. The enchantment with the world instills the will to take it for oneself, care for it and care for one another, as to assume its continuity and transformation. These change-making skills may be understood as those fundamentals for children of our fluid and globalised world to continue to create meaning and assume responsibility for it, and take on a role as changemakers in the change renewal and care, demanded by the different realities of today and tomorrow.

EMPATHY

Empathy plays a crucial role in the development of new ideas and the transformation of reality because it conveys the capacity to com-

prehend many different perspectives of today's complex problems, as well as the capacity to collaborate with others to solve them. It also implies the ability to listen to other people's ideas, as well as the ability to articulate one's own. It entails the capacity to lead a team on a given day and participate as a team member on the next. Empathy demands the ability to know one's thoughts and feelings and other people's thoughts and feelings, but most importantly the ability to connect them all, moving out of the self into a deeper vision of the world one formed by the various perspectives that form it. This capacity to take on other people's perspectives is part of what makes us human, and it is necessary for our imagination. Empathy helps us work better in teams, valuing the unique contributions individuals brings to the table. When we can appreciate the motivation, fears, weaknesses and strong suits in others, we can find ways to work more productively on the resolution of complex problems that affect us all. In this way, it is, also, key in the democratic process. Therefore, empathy – connecting with that which is foreign to us, but concerns us deeply – is a key ability for life in society, and even more urgent in a globalized and constantly changing one, as we have today.

TEAMWORK

By teamwork, we understand the ability to cooperate, to take common action within diversity, to achieve common goals. This ability is mostly built through the living together of different students in self-organized groups, in an ethical and democratic environment. It is through cooperation in and outside the classroom that students constitute themselves as friendlier and more open-minded social groups. Within a society that has ever more intensely pursued personal achievement, focus on cooperation as a fundamental ability is necessary for the development of the collective spirit required for transformation.

For this reason, we should think of the educator as a mediator of relations and conflicts who strives to allow students an increasing in-

dividual autonomy, and self-management capacity for their groups. And we should, therefore, think of a school that provides experience in a different group management dynamics and, above all, that can provide a space where educators and managers can work in a cooperative way. This way students will be able to build a more homely world, one that belongs not only to them, but everyone else as well. Listening to others does not only enrich thought, but action too. Changemakers know this because they acknowledge that only in collaboration with others will they be able to accomplish truly positive and meaningful interventions. In a world as dynamic and diverse as our own, this approach is necessary for positive intervention in different contexts.

SHARED LEADERSHIP

Inside the fluid reality of globalized society, the concept of leadership, as so many others, requires some revisiting so that it could conform to the demands of the complex contemporary reality. The hierarchic models of leadership, characterized by authoritarianism and stiffness, lost space in institutions, and today the opposite is gradually being more valued: leadership must take place through the conjunction of subjects inside a democratic movement that can offer voice and possibilities of action to all those involved. In a school context, leading the class from the front of the classroom does not suffice; it is necessary to know how to lead from the “back of the classroom,” which means not being in the spotlight. Shared leadership must be involved in an open, flexible model, capable of inspiring and engaging, of drawing in, rather than repelling. The imposition of rules does not fit this model, which is, instead, based on horizontality and plurality. Anyone who is to lead today must be opened to this dialogic and participative process, which is a characteristic of the 21st century. Affection, communication and teamwork are the foundation of shared leadership.

In practical terms, we can think of the school as a fertile ground to work on this competence, but for it to be properly understood and

internalized by children and adolescents, it is necessary for it to be present in the totality of the schools' structures – from the principal to the classroom. Paulo Freire echoes this idea when he opposes hierarchical relations and proposes an education built on communion and horizontality. Educator and student, in Freire's eyes, take on temporary and flexible roles in a spirit of partnership and work toward equivalent autonomy and the possibility of intervention.

CHANGEMAKING

Far from being a mere tool, changemaking springs from one of our most essential traits: we are, by nature, beginners. With every birth hope in renovation and transformation of the world arises again. It is an inherent quality, but one that requires tending, so it can flourish with strength in all its potential. Changemaking is the capacity to take the initiative towards the positive transformation of social reality, actively seeking engagement with one's surroundings. The social changemaker assumes the collective issues as his causes and, hence, departs from a position of subjection into action; he is the one who questions ready-made models and actively engages the process of transformation.

The development of this competence begins in early childhood, when the child is given the opportunity to participate in and decide about his, however small, surroundings. Through his participation in subjects that are interesting and through the possibility of having a choice about his small universe, this initiative opens up to encompass his school, neighborhood, city, country and, eventually, the world, according to the possibilities of engagement of his social stratum offers. This initiative also gains strength from the blooming of the subject's critical thought, which brings conscience to the issues around him, and, above all, from the creativity required to manufacture new solutions to problems posed by reality. The emphasis on creativity is fundamental, because it values an active learning process and authorial production by students, stimulating different forms of expression and the creation of innovative solutions to prob-

lems. Changemaking requires freedom, and it is intimately linked to critical and creative processes; it is, in short, the capacity to increase one's acting field and to create the envisioned reality.

As we have seen, these key competences to a transformative education, as we propose, are closely connected to respect, diversity and human rights. These are basic values, which we can learn. In an unequal system, such as the Brazilian and so many other throughout the world, we must struggle so that every child and adolescent has access to an education that allows them to fulfill their entire potential, as is their basic right.

In this light, it becomes clear that the three great competences we hold today as basic – reading, writing, and arithmetic – do no longer provide an adequate basis for the preparation of our children for the future. With the ever-increasing interactions between different social segments and cultures, we need to create conditions that will equip new generations to develop and sustain horizontal relations. The school has to become a space in which the arts are just as important as mathematics, a space in which a social project is as important as the science project in the lab. It needs, therefore, to handle different dimensions of knowledge: learning how to learn, learning how to do, how to live and how to be with others, as is stated in the praised Jacques Delors report to UNESCO in 1996. And if we can't do that, we will fail generations to come.

It is important to say that there is no handbook as to how to cultivate these change-making abilities in schools: realities are too diverse. What works in one place may well be of little use in another. And for this reason, what matters most is that we can build a shared vision and shared expectations so that we can contribute with different experiences that have allowed these abilities to flourish. Building a world where we can all be changemakers requires us to look beyond conventional approaches to change in schools. We are talking about more than merely creating or replicating programs or curriculums, starting a new experimental school or launching an advocacy campaign. We are talking about a shift in mentality toward education.

LEANING ON GIANTS' SHOULDERS

The principles that lay the ground for the development of this set of abilities are evidently not new, as they echo many historical and contemporary references.

One of the most important of these is Paulo Freire, whose pedagogy proposed, largely, a transformation of society which could only be accomplished after overcoming what he called a “banking” and “authoritarian” education in favor of a “critical” and “dialogic” one. He goes beyond overcoming a traditional approach and builds the theory and practice of a libertarian education that works for the formation of citizens and, ultimately for the transformation of society. Every aspect that we seek to achieve in Changemaker Schools can be found in his work, which is, naturally, broader and more complex. We maintain what he calls the “reading of the world” – the basic condition to any process of social and personal transformation. Cooperation, empathy and shared leadership are concepts he insists upon throughout his work. The famous statement that upholds is that we can only educate ourselves in communion and mediation, and in the world that can largely be seen as the very synthesis of what we understand as a change-making education.

Another important reference is Célestin Freinet, a pioneer of Democratic Schools. He argued that, beyond pedagogical technique, the school’s social and political surroundings must not be ignored by the educator. His practice cares for this formation of a social individual, who can act upon his present situation. He stated that the teacher ought to combine his work and community life, by creating councils, associations, elections and other forms of participation and cooperation, directing the educational process toward the defense of fraternity, respect and the growth of a happy and cooperative society.

Henri Wallon and his humanly and politically engaged pedagogy are another fundamental references because they favor a holistic concept of education, one that stresses the importance of understanding the roles of affection and emotion. Emotion, he argues, plays a major

role in an individual’s development. It is the manifestation of one’s most intimate needs, desires, and intentions that cause an impact on people around him. Therefore at school an attentive teacher can identify moments of tension, discomfort, and fear which can hinder the student’s learning process. He thus starts his holistic approach to education in which cognition is comprehended as a conjunction of four “functional fields”: movement, affection, intelligence and the person.

Also extending the boundaries of what is known as cognition, Lev Vygostky states that the imagination is the basis of creation, which, in turn, is the foundation of experience. In this respect, Vygotsky argues that “this means that everything imagination builds influences our feelings and that even though this building may not suit reality, all feelings it startles are real, and effectively lived by the human being who may experience them.” For this reason, creative activities become fundamental to education, which must then favor the creation of environments that stimulate and respect the free expression of a child’s creativity. Curiously, Vygostky also made an effort to understand the phenomenon of empathy, originally in the field of aesthetics, but which bears interesting implications on education.

Very much in line with the thought that orients our initiative is an American philosopher John Dewey’s. Dewey is a pioneer of the progressive education movement in the USA, which deeply influenced the creator of *Escola Nova* in Brazil, notably, Anísio Teixeira. One of its main goals is to educate the child as a whole. What matters is his growth – physical, emotional and intellectual. The principle is that students learn better by performing tasks associated with the subject that is being taught. Manual and creative activities are prioritized, and children are stimulated to experiment and think for themselves. He was also a great teacher of cooperation and cooperative practices among students. In this context, democracy wins, since it is a political order that allows the greatest individual development and requires common decisions regarding the fate of the group. Dewey claimed that democracy should be placed inside schools as well. He said: “after all, children are not being prepared for life and living in separate mo-

ments,” arguing that learning comes about precisely when students are placed before real-life problems. Education, as Dewey sees it, is the constant reconstruction of experiences, to make sense of them and equip new generations to respond to the challenges posed by society. To educate is more than to train for the reproduction of knowledge, it is the arousing of desire for constant development, the preparation of people capable of making changes.

Maria Montessori is yet another mandatory reference. Indeed, Ashoka acknowledges her value not only as a physician and educator but also as a historical example of social entrepreneurship, as she developed a clear method, with vast possibilities of application, which was responsible for a paradigm shift in society. She believed that neither education nor life should be limited to material achievements. Other objectives should be more important, such as finding one’s place in the world, developing gratifying work and nurturing interior peace and density to be able to love. Montessori believed that these should be the foundation of any peaceful community constituted of independent and responsible individuals. Even today this collective goal is the ultimate one for Montessorian education. She developed a sensitive and loving approach to children, setting them at the center of everything and privileging their freedom of thought and choice.

Holistic education reaches one of its fullest conceptions with Rudolf Steiner and his Waldorf pedagogy. Steiner’s work is complex and diverse, but, in the context of change-making schools, we are interested particularly in the education of will and in how this dimension must be treated profoundly. In Waldorf pedagogy, changemaking is not usually treated instrumentally. What matters, above feeling and knowing, is cultivating a deep will connected to the whole in a way that allows a sense of agency to be developed. There are many intersection points between the Steiner pedagogy and our vision, but we will stick to this conception of the education of will and its relation to the transformation of reality. On this topic, Steiner says: “(...) part of the moral action is based on a knowledge of the world of

the phenomenon in question. (...) moral action presupposes, alongside moral intuition and fantasy, the capacity to transform the world of perceptions without violating the natural internal order of the objects to which actions are directed. This capacity is called moral technique. It can be learned, as science, in general, can be learned”.

There are two points that deserve our attention here: the, shall we say, *ethical* nature of the intended transformation and the “moral technique” as something that can be taught and learned, which is fundamental to our argument that cognitive and moral development walk hand-in-hand.

An often neglected but important reference, with deep repercussions to a citizen’s formation, is Jiddu Krishnamurti, commonly associated with a philosophy of spirituality, but who also gave a great deal of thought to education. Krishnamurti thinks of school as a place to learn about the totality and plenitude of life. Academic excellence is necessary, but a school includes much more than just that. It is a place where both teachers and students explore not just the outside world, the world of knowledge, but also their thoughts and their behavior. It is, thus, a place where the great existential questions can be explored in an atmosphere of freedom and responsibility. He thought that if young and old men could be awakened from their conditionings of nationality, religions, prejudices, fears and desires, which leads to conflict, they could welcome to their lives a new quality. This conception was rooted in a transcendental idea of empathy that dialogues, to an extent, with Paulo Freire’s “planetary citizenship.” Krishnamurti’s legacy found expression in many schools, initially in India and, later, in Europe and the USA.

We could also make reference to other authors. For instance, empathy finds a strong echo in Hannah Arendt, who developed the concept within the field of political philosophy. For her, the stronger our capacity to put ourselves in other people’s shoes is, the more human we become. On cooperation and teamwork, we can ask Bernard Lievegoed, who points to a sophisticated conception about this centrality of collective work in change-making actions.

There are great, more contemporary references, such as Frans de Waal in his broad discussion of empathy in nature³⁰.

A NEW NARRATIVE FOR A NEW HISTORICAL OPPORTUNITY

But, if so many have argued and built entire lives' works on the importance of this particular vision of education, why do we still need to defend it? The first, more obvious answer is that this vision is still a long way from being accomplished in practice. The second, for its diverse nature and, in most cases, restriction to selected niches. These pedagogies have not taken on the framework of a great narrative accessible to every citizen, and not only specialists. Finally, the construction of this narrative is justified by the unique historical moment we are living.

In the last decade's innovations and technological improvement, especially in the areas of communication and transportation, have changed drastically the forms of production and distribution of knowledge, as well as the relations between people and of people and their surroundings. We have reached a moment when the consequences of modernity are becoming more radicalized and more generalized to the entire world, outlining the sketches of a new order. This scenario demands new systems of comprehension of the world, of production of knowledge and new forms of social interaction. The new social order demands proactive attitudes and the pursuit of creativity and initiative.

This means that we must challenge education's current paradigm which is still preparing generations for a hierarchical world, vertical and divided into separate areas of knowledge, a banking model, that can only lead to reproduction of the current inequality. It is necessary to think beyond the self, beyond walls. We have to build a new paradigm that upholds dialogic relations, authorial creations, changemaking, solidarity, critical spirit and change-making practices. We want everybody to recognize empathy, teamwork, shared leadership, creativity and changemaking as

competences as important as mathematics. These are skills we can learn and cultivate, so we need to take them seriously.

But forming change-making children and adolescents is not enough, because it does not handle, by itself, the need to regain Geisiane's and many other young men's and women's trust that their yearnings and ideas will be contemplated and expressed. That is why it is necessary to create a system that can conduct social and institutional changes capable of including empathy and changemaking as new paradigms, both in education and as the basic experiences of new generations to come. We want everyone to be able to take on social challenges for themselves because this way we will have higher chances of addressing the most pressing matters in the world and constructing a more just society. This is why we seek to give visibility to teams of schools that are innovating and giving them the incentive to expand their experiences and connect with each other. We work so these schools can collaborate with social innovators, legislators, academics, and communicators, participating in talks and actions on teachers' formation, teaching evaluation, parents' expectations, and many other subjects. Only this way will we be able to build social demand for an education and a society based on principles of empathy and changemaking.

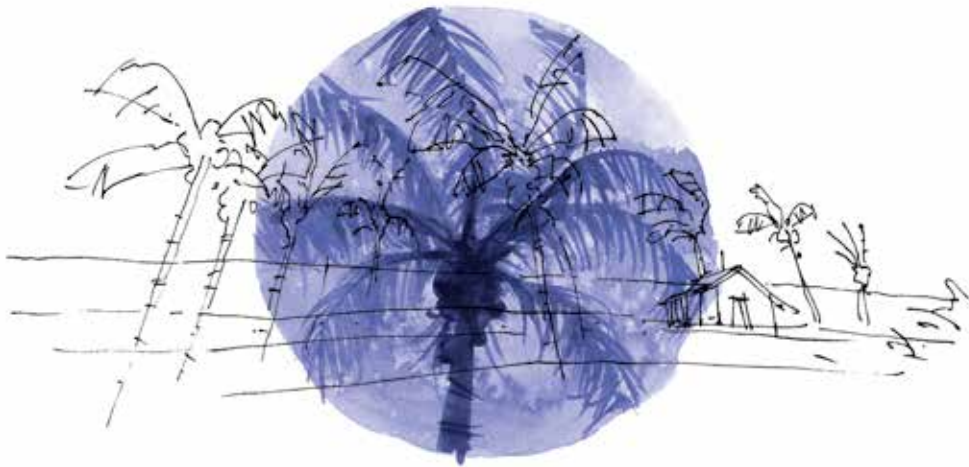
In Brazil, for instance, we have a rich universe of initiatives that are rethinking education based on the premise that everyone can be a changemaker. Ten schools have already been acknowledged, integrating a community that counts, to this day, with over 200 Changemaker Schools in 28 countries³¹. It is, therefore, a demand and a narrative with global dimensions that cut through the most diverse pedagogies, public and private systems, urban and rural areas and different historical and cultural background in every continent.

Today, Geisiane and all of us can allow ourselves to dream with this change, because it is already on the way.

INKIRI LIVING UNIVERSITY

PIRACANGA - BAHIA | BRAZIL

Flor Dillon



It has been two and a half years since the *Universidade Viva Inki-*

ri, located in the south of Bahia in the community of Piracanga, has been fulfilling the dream of many young people with a model of education that is very different from traditional standards. As a unique project, the university opens doors for young people to express their inner truth in all aspects of their lives. Due to this protected space, they have the possibility to break habits, concepts, and standards and live a completely different reality, experiencing new ways of being and acting in the world. We believe that to mould individuals and help them share their gifts and talents to the world it is necessary first to help them heal from their past and understand it. Their wounded child and, thus, they will be better prepared to face challenges and build healthy relationships.

It's putting faith in this education, free of forms and definitions, that a community has been developing this work because young people are the future of a new world that is being built every moment. At Universidade Viva Inkiri, they have a chance to experiment and learn about themselves by choosing projects to work on for three months, receiving guidance from guardians, who help them walk their individual and collective paths. We believe in the singularity of each person, and we know that everyone brings a gift and a talent to be shared with the world and, when we are not expressing our truth, we choose a path

of pain and anguish that is generated by this disunity between our body and spirit. Unlike traditional universities, the projects are their compass toward authenticity. With this, young people become aware of seeking the truth within them, which constitutes their essence.

The university follows three pillars for young people to awaken the values within them: living in a community, selfless service and personal responsibility. By living in a community, they learn how to create agreements and rules that help in the harmony of the house, learning how to respect their, others' and everybody's space. The sharing and weekly meetings held at the house give young people the opportunity to share their feelings, situations, and discomforts with everyone and, thus, become vulnerable and transparent in their relationships. It is at these meetings that they gain the courage to look at their shadows, egos, defenses, and wounds and open space for great unity and compassion among all. We are making a movement towards love, so we must take responsibility for the awakening of spiritual values, because we know that today's conflicts and violence in society exist due to the set of traps that we created, believing in the great illusion that we are separated from each other.

The essence of all this work is altruism, which we believe can transform and revolutionize the way young people express themselves in the world. Another pillar that supports this work is personal responsibility because you discover that the root of all that is taking place outside you is within you and, as a result, you stop putting the responsibility on others. At the university, the whole game of accusation and victimization of the human being is transmuted, strengthening personal power in everyone.

The Uni receives young people from 18 to 28 years old from different regions of Brazil and the world, not only focusing on the community and the region that it is located in. In this way, the impact turns out to be not local and concentrated, but geographically dispersed and not less relevant, since many young people after the end of the program return to their places of origin ready to act as agents of change.

During the period of the University, which varies from three

to six months, young people are invited to abandon old habits and, for that, the consumption of alcohol, tobacco and any other type of drugs and narcotics is not allowed. The work proposed by the Uni requires that people give up these distractions so that individuals have a chance to actually connect with themselves.

The objective of the work of the Universidade Viva Inkiri is beyond the transmission of content and preparation of individuals to the labor market, as in a traditional higher education institution. For that reason the structuring in disciplinary chairs and a programmatic content to be followed seem to be insufficient. It does not account for the challenge of helping prepare young people for a new world.

STRUCTURE

The University Village is composed of three houses with single and double rooms which have in common a communal room and a kitchen, art space, music space, permaculture center and vegetable gardens, woodwork, therapy room and a temple for meditation, yoga, and sharing and living experiences. Also, the village has dry toilets, grey water treatment system (banana circle), waste sorting program, rainwater harvesting and, just like the entire community of Piracanga, it uses only the sunlight as a source of electricity.

Every student is not only responsible for his/her own bedroom - cleaning it, doing maintenance and even having the freedom to improve it and make it more personal, - but also takes responsibility for some common space, ensuring that the environment is always conducive for coexistence. Coexistence is the great pillar of the University Village as young people from different parts of Brazil and the world share similarities and differences, and are challenged to experience life in the community, creating their agreements and rules. In this process, the coordinators of the University play the role of facilitators by always giving room for dialogue. The coordinators themselves are young, which brings them closer and creates a less formal relationship.

The University does not have classes, and instead, young people

choose two projects to develop during four days out of the week, one in the morning and the other in the afternoon. Two days are reserved to carry out work inside the village so that the young people have the opportunity to realize their endeavors. Saturday is a free day for students to enjoy the beach or even go to Itacaré, the nearest town.

The young people who attend the University have the possibility to participate in several projects within the existing areas at Piracanga. Among these are:

KITCHEN ALCHEMY

Here the youth explores their skills as cooks, learns a lot about vegan cooking and explores their creativity. First, they spend some time taking a course that will prepare them to meet the demand of the restaurant that serves the community guests.

NATURE SCHOOL

Young people come into contact with permaculture and the possibility of reconnecting with nature. The areas of activity are:

Agro-forestry: helping in the dream of turning Piracanga into an agro-forestry, and planting species that add benefits to the land so that one day everyone will be able to reap the harvest of this work.

Dry toilets: learning how to use this efficient technology that does not pollute groundwater and transforms feces into fertilizer and biofertilizers for the agroforestry production systems, thus closing a cycle.

Biological Wastewater Treatment: as Piracanga is independent of a water supply system, the water treatment is carried out by living systems supported by plants and microorganisms. Young people, besides coming into contact with this technology, are invited to rethink their relationship with water and to use only biodegradable products.

Temple laboratory: “Plante” production site, a line of biodegradable products that guarantees the water’s purification and the soil’s health.

Gardening: young people have the chance to participate in the pro-

cess since the beginning (the seed nursery, the preparation of seedlings and the land, and the planting and designing of the flowerbeds.

Solid waste management: all the discarded materials are cleaned, collected and separated to receive a new concept. The basis of this whole process lies in the ingrained belief that garbage does not exist, and can always be recycled and, thus, it is a resource.

MUSIC SCHOOL

There are several classes related to instruments, singing, dancing, and body expression. The project opens up possibilities for young people to explore their gifts and express themselves. The main areas of activity of this school are:

WebRádio Piracanga: vehicle of diffusion of Love in the form of music, programs and inspiring words. A channel capable of strengthening other projects, ideas and initiatives that dignify humanity and the planet as a whole – www.radiopiracanga.com

Therapies: the “Caminho da Música” is a retreat for musicians and nonmusicians, a unique experience of immersion and connection with their inner music. The Music Project also offers experiences integrated into the courses held in Piracanga, and a sound meditation performed every morning at the Centro Cultural das Rosas.

Shows and Events: ensuring the energetic and musical quality of the events of Piracanga, taking care of the good vibration of the environments and people in the different moments of our reality.

Music Production “Casa Som”: recording, mixing and mastering studio that photographically records musical work that characterize Piracanga, as well as compositions that are aligned with the work of the community.

INKIRI SCHOOL (ESCOLA INKIRI)

This project opens doors to observe and follow the work that has been developed by this school in the direction of a new education.

SEA AÇAÍ (AÇAÍ DO MAR)

A youth-led diner in the inkiri community, friends meeting point and where college students can develop their skills by venturing into vegan cooking.

THEATER

A space that opens the opportunity to discover hidden talents through performance, expression and spontaneity dynamics. It is also possible to participate in presentations, which strengthens all the work done.

CARPENTRY

A place where creativity and the manifestation into matter happen. A lot of furniture and objects are produced within the community, and this space opens doors for turning ideas into achievements.

BIOCONSTRUCTION

Sustainable constructions that use natural materials, using clay, sand and piassaba. Many houses in the community use this model, and it is possible to participate, learn and keep up with the building process.

OFFICE

A place where decisions and gatherings of the university projects are consolidated, making all that process possible. Here it is possible to develop communicative, financial and administrative skills.

SOME EXAMPLES OF COURSES THAT ARE OFFERED:

- » Meditation of the Roses (facilitated by the teachers of Piracanga)
- » Reading of Aura (facilitated by the teachers of Piracanga)
- » Reiki (facilitated by the teachers of Piracanga)
- » Silence Retreat (facilitated by the Uni coordinators)

TESTIMONIALS

ANGELINA ATHAIDE – PIRACANGA FOUNDER

“Once upon a time, on a sunny day, I was sitting in a hammock in front of the river, enjoying the beauty of Piracanga, when I saw two bright-eyed girls approaching me. They sat on the green grass and told me these words: “Angelina, we have a dream, we want to create a Free University in Piracanga”. Rita was 18 years old and Aline 21, two very different girls from two different continents, one was European and the other from South America. One had spent her life studying, and the other had been traveling and seeking her freedom. The enthusiasm in them was irresistible, and I listened to them. I must confess that at first, I thought it was crazy what they were talking about. A university in the middle of the jungle, on the beach, far from the cities - that seemed to be impossible to me. But the enthusiasm of these two cheerful young women was contagious, and I continued to listen in silence. Suddenly, a miracle happened inside me: the impossible seemed possible. I realized that I was listening to something so new and brilliant that my mind had been wrapped in fear of the unknown, but my heart jumped with joy and every word they spoke opened spaces of joy within me.

When they finished telling me the dream, I tried to stay calm and ask them to do a project to present to the community. They smiled, with the winning smile of those who know they won, and they presented the complete project to me. There were even drawings. I lost my stillness, and I jumped of joy. It was one of the most brilliant ideas I’ve ever heard. And so it was born - a Free University, a dream of two young people to join learning and freedom, and so discover who they really were!

The University is one of the biggest treasures of Piracanga. It is around 2 years old, and more than 180 young people have been there. It was created by young people for young people - the greatest miracle, and perhaps its greatest advantage. They gain the experience of living in the community and learn how to live in uni-

ty, to serve, to give their best and to respect the other. Most of them leave Piracanga healed, happy, knowing who they are, full of strength to follow their dreams, loving their parents and thanking life, with the awareness that it is possible to change the world with peace and love.

Here young people learn how to know their soul, their personalities, and diverse inner perspectives, discovering the truths of their heart. Many doors are open to learn and to discover their gifts and talents, such as cooking, planting, singing, painting, and self-responsibility with their tasks. Also, they learn to listen and to be heard, to know God, the God of their hearts and the God who lives in the trees and birds, learn to listen to the rivers and human hearts, learn about friendship and fellowship, learn to love and to be loved.

Today the University has three guardians: Flor, Soraya and Manu who dedicate much of their lives to creating and recreating, to supporting and serving the Uni. Young people come from all over the world in the pursuit of healing, freedom, evolution, and of themselves. They are respected, honored, loved and have the freedom to create what they believe in.

I could not mention in writing all the miracles I saw happening with the young people who lived in the Uni. I have been learning a lot from the young people in Uni myself. I learnt about responsibility, about union and integrity, service and truth, I learnt about freedom and love, joy and celebration. Because they are bright and creative, just as I believe all young people in the world are. They just need opportunities to be given to them because today's world closes doors to them. How are we going to change the world and create new possibilities for humanity if we do not have the humility to look at the world we created and see that something is wrong and that we urgently need to change? This change comes through young people naturally, when they are given the necessary conditions. Only then they come up with a wonderful world that goes beyond our old perspectives and opens doors to a New Age."

MARÍA FLORENCIA MARTINENA DILLON
26 years old, Argentina - Uni's coordinator

"The greatest impact we can bring to the society is through the youth. It is the possibility that I see of making a difference, from a place of conscience, love, and reconnection with being. Throughout our lives, many powerful events happen creating wounds, which are then reproduced in our daily lives, in our work and in our family dynamics. That's why we need to go to the roots of the causes if we really want to build a different world and bring about a real change.

The process happens in a very welcoming way, as if it was a return to the mother's womb. Young people are encouraged to access their memories of what happened to their families and stories that keep repeating in their lives. Throughout life, we have created several personalities with friends, families, in college and at work, and over time we start to believe that we really are this person. During the course at the Universidade Viva Inkiri you begin to see who you truly are, of all that you have created throughout your life. The idea is to see the various challenges in life and limitations that are preventing us from living our true purpose. We open a space for the youth to have this time to deconstruct that thing that separates them from their purity and their union with the whole. The whole environment allows them to see and discover what really happens inside. Everything that is occurring on the outside, even feelings, such as insecurity, fear, anger, competitiveness, is an invitation for them to look inside.

During the sharings and weekly meetings held at the University, we dissolve all these standards and masks, and we enter into connection with people not due to what they are or do, but due to their hearts. Then we lose the addiction to identify ourselves and relate ourselves based on our personalities, fears and superficiality.

The essence of the University is having the possibility of this encounter with yourself, where you cut out the old habits and the addictions and return to yourself. All that happens with the

group of the university students and me, the coordinator, is because we are committed to working, both in the matter and in the interior.

The University is supported by coordinators who are working on themselves and an entire community – a mini-city – which functions by itself. For the changes to really happen, we need people who support the students. We have the support of Angelina, the community founder, aura reading teachers and guardians of the projects. Without them nothing would be possible. This book, for example, is a seed that can open many doors for more people to find out about this project. We want to show that magical things happen in the university: transformations and processes of cleanliness, healing and reunion with the spirit.

The whole system is built on trust, love, commitment to our inner work, commitment to our truth, not fear, which leads us forward and inspires more people to seek the work and to want to work on it. The impact on society is this: we are building the future, and to do that we need to look at our wounded child, we need to look at our resentments, our pain and our selfishness.”

ÍCARO TAVARES CAVALCANTI

24 years old, Recife - Undergraduate student

“The experience here is incredible because here we have something that education out there does not give to us, which is precisely the freedom to be able to experience everything that we want. The education out there is half-shaped, aiming for the labor market and not so much for the happiness of the person. And here, what we see is this pursuit of happiness, a meeting of his/her essence so that later you can take it to the world. The education out there preaches that you need to firstly find out what you will do and then find yourself. However, here we do the opposite.

I studied Psychology, Law and Physical Education, but in none of them I felt complete. And then I discovered that it was not the course itself that did not make me complete, it was me not having

met who I was. It does not really matter what I’m going to do, but I have to be in touch with who I am, with my essence first.

Outside, it’s like if we have to find what to do and then find the essence as if the essence is a hobby to look for only at the end of the week. And here, we learn in a different way. This is the first step we take.

At this moment I have no intention of attending a conventional college after I finish the Uni. But if I did, I would certainly do it with a much better mind than the other three times I tried, because now I feel that I am finally in touch with who I am. I think that here we are prepared for the world out there.”

RAPHAELA PRADO

24 years old, Rio de Janeiro - RJ - Former undergraduate student and current inhabitant of Piracanga

“I live here in Piracanga, and I came to the Universidade Viva Inkiri in July 2013. In fact, what brought me to Piracanga initially was precisely the possibility of new educational model. I found out about Piracanga in a lecture about the Inkiri School that I went to in Rio, and there I also discovered the university. What attracted me to the Uni was this possibility of seeing that everything that I thought to be utopian or belonging to the future was already real, in the sense of new ways of relating, of organizing, of learning, of living. And the University, for me, were very intense six months of the structure that the university provided for us. The most important for me was being able to connect with your inner self, but always in contact with the community, relationships, and the awareness that everything around you is a material to your own learning, to learning about yourself.

The University project offered something that I did not know until now: to redeem yourself, to strengthen yourself in the practice and actions you will carry out on a day-to-day basis, and in what you want to learn and what you are interested in, but always focusing on expanding yourself overcoming your limits, the ideas you have about yourself, what you are good and bad at, and seeing that this idea that we came to do just one thing, for me, is an illusion.

It is an opportunity to reconnect with the network of collective learning: learning all the time, whether washing dishes, going to the permaculture project, or going to the art room, but constantly maintaining relationships, relationships inside the group and learning how to rebuild affectional bond of trust, which I believe to be the base to start trusting in oneself again and trusting one another, to be able to go through everything that happens together.

I graduated from college and then came to Uni. I think that these two things complemented each other in my story. A traditional university is a form; however, nowadays the vast majority of people see it as the only one. They have many good points and work for certain types of people. We forget that the university is not the only way. And the Uni here connects you back with the view that the forms are multiple, you just need to find yours and allow yourself to experience and believe that there are other ways.

The college, at least mine, brought little practice and little awareness of what I was learning to apply to the outside world in my “professional life,” bringing this separation: your professional life, your career, and you and your life. I feel that Uni brings the awareness that these two things are together, that there is no separation, your choice of acting in the matter is just another vehicle of connection with yourself, that must be very well valued and heard to choose where you want to direct your energy during your life. I believe it is something we are passing on, planting the seed in people. It would be interesting to bring this consciousness to the traditional university as well. At the university we are also in community relations, in processes of self-knowledge and togetherness all the time, but each one in his/her own process, more unconscious, with more separation. I feel that it is only to strengthen ourselves, to open our eyes on the bond that is already made and to make ourselves responsible for your story, for what you can do, and not just reacting and criticizing the system.

Since I have begun at Uni, I am in the nature project, and now I live and work with the person who would be, in the outside world, my boss. Here she is the project leader and my best friend. The

projects are a way of going deeper in myself and of changing the action, changing my practical action in life, getting out of the whirl and getting real. Maybe, if I had gone to a biology college I would have missed that awareness of nature and what my work here awakened inside me. The Uni was a gateway for me to be where I am today. It was a portal, it allowed me to enter a part of me that in 5 years of conventional university I could not access. But in 6 months everything changed. Long live the University! I love it.”

ANTONIA SZEMEREY, 22 YEARS OLD, GERMANY
Student at Universidade Viva Inkiri

“Universidade Viva Inkiri is a place where I can try out many different areas without people depositing too much pressure on me. In a traditional university everything you do is a duty, you don’t have the space to create and propose new things, and if you don’t accomplish them, you have the risk of failing. Everything I did in my life was always with pressure, and here I feel I have time to know what I’m looking for in my life. Uni is a place where I can figure out what makes me happy, what I enjoy doing, and what I would appreciate doing for the rest of my life.

If there were more universities similar to Uni, young people would have more clarity about themselves, about who they are and where they are going. Many friends of mine are attending traditional universities, but they are not really happy. They often don’t know why they are doing it and where they are graduating. Life can be beautiful, and you can enjoy the things you are doing, and it’s not just about doing something to earn money, you can choose what you’d like to do.

My experience coming to Uni happened in a moment of my life when I did not really know what direction I wanted to go, what exactly I wanted to study. Therefore, I came with the intention of figuring out what I was really good at, and to gain confidence in me through the projects offered. Here, I have space to figure out what my talents are, Uni made an impact on my life and on how I see the world.”

THE CALL FOR AN EDUCALYPSE

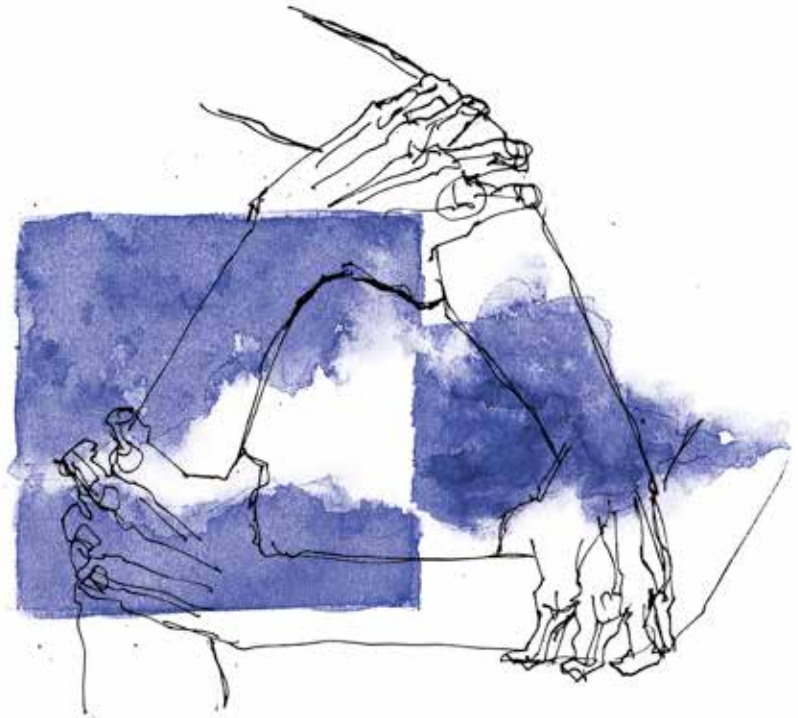
DISASTROUS SCHOOLING AND THE
TROUBLES IN THE WORLD.

Floris Koot

I think we need to deeply question the dominant approach to education and frame essential change. Regardless of all good intentions, I believe current education is harming people, our society and our planet. I experience the ever growing need for an educalyse³². What's at stake is bigger than many are aware or dare to accept. Is it fear of change? Weird, because the solutions are more fun, meaningful and involving for anyone who dabbles in education. So let's take the plunge and see how deep the rabbit hole goes....

HOW I STARTED MY JOURNEY TOWARDS A NEW VIEW ON EDUCATION

On a beautiful September day, I had just started primary school at the age of five. I made a classic child's drawing for my teacher, who seemed very nice. A house, people, a tree, clouds and the sun. From my seat, I could look at the sky, which was very blue, with beautiful clear white clouds in it. This is the reality I had attempted to draw on my white paper. When I gave it to my teacher, she looked at it and said: "You should draw clouds in blue." That shocked me. How could my attempt to draw white clouds on white paper end up 'wrong'? I thought the school was



supposed to tell and teach you the truth, and here was a clear conflict. Let alone the fact the drawing was a present and not a test result. From then on I decided that if there ever would be a conflict between my observations and how school taught things, I would follow my observations. Hence, I think it's crazy when school does teach you answers, yet doesn't teach you how to connect them to your personal observations, nor teach to research or deal with differences when they happen.

Throughout my education, I have been shocked by the astonishing amount of teachings that follow custom or convictions, rather than openness to what is really there. From nationalistic versions of reality³³ to rewarding the 'right preconceived' answers. I experienced most of my education as a struggle to oblige and satisfy others. My real me went into hiding, as I felt like nobody was interested in my real me, or would accept it. My real me, what I consider as such, only came out much later. Around me, I see a lot of people who have been through the same pattern. Many of them went into hiding for life, even seemed to accept that as "the way it works."

Millions ask this question, whatever the situation: "What exactly is expected of me here? What is the answer 'they' are looking for?" I consider such effects of education as damaging and belittling of true potential, rather than helping it unfold. I even found that the question "What would you love to do?" scares a lot of young people. I recently met a few students who'd much rather do a test with preset answers, than discuss their own desires. How can that be?

Once I gave a workshop in a 'normal' school about social activism. The children were polite, asked questions, and cooperated well. But I kept having this very awkward feeling about the lesson that I never get with my alternative school students³⁴. At the end of the lesson, their class teacher remarked I was the third invited speaker in a row, and they soon would get a test on the stories they had heard. And I suddenly understood the sense of wrong-

ness. Shockingly lacking was all curiosity on how this might apply in their life. Not one of them had asked questions for themselves. They had only noted down what they might be asked about later. No wonder they hadn't even resisted or challenged my ideas. All personal interest was lost to the need to be able to give the 'right' answers later.

School repeats this exercise throughout the whole education period. Give the right answers! Repeats this exercise throughout the whole education period. Repeats this exercise. Repeats. So what does that teach? Being able to give the right answers doesn't mean you understand the material, nor that you can apply it. It has nothing to do with the 'ambiguity of reality' either. There are always multiple ways we can approach any situation, and quite a few approaches will work with different benefits. Then why do we teach through 'the right answers'? For the convenience of the institutes! It makes all results nicely measurable, and 'progress' can be proven on scales. Thus, the testing to prove progress handicapped education and this damaging practice continues.

Once a manager told me crying: "*I explained them all the models (as he had learned them at university), and they aren't doing it. How is that possible?*" Was he a fool? Or is his education lacking? I met too many managers that can't communicate normally with their people, can't self-reflect on their role in difficult times, and can't understand the difference between theory and practice. Can you just begin to imagine the havoc created by millions of such managers?

Observations like these made me become an educational innovator. I prefer to focus on helping students to find their own answers. Mainly, I seek to help them get in touch with their values, dreams, ideals and start acting upon those in the world. I can challenge them, question them and have compassion for them when they fail or make mistakes. Because mistakes don't mean failure. Mistakes are a string of lessons on how to make things work for you. And testing this is out of question.

Hell, not even all universal principles or general guidelines taught at school work best for everyone. Some speakers are brilliant while being stumbling storytellers, because of their authenticity. For a while, I worked with a change activist/artist who would hardly know how to be a leader. She'd just ask her network in a very sweet tone and with the puppy eyes for help. And help would come in droves. Now, should I have pushed her to follow what the rule books say on leadership and decision making?

I try to help my students discover how they can make their personality work for them. Changing it only makes sense when their attitude is really in the way of getting where they want and they are eager to change. For the rest, I helped people embrace laziness and become inventors (how can this be done easier?), or embrace their impatience and use it as a tool to get things done. Then it's more about making their attitude work for them, rather than thinking they suffer from some kind of weakness.

What works for an individual, connected to a healthy willingness to keep on improving and adapting to a changing world, is to me a very strong education indeed, especially when aiming to contribute towards a better whole. Many of our former students at Knowmads facilitate people too, trying out beautiful things and making their contribution. They fell in love with our

approach. We catered to people who were dyslexic, had ADHD, never finished anything before, those with an of the scale IQ, investment bankers, fashion designers, musicians and managers. In my case, I focus on developing others from the inside out, helping students find out what works best for an individual on top of general knowledge and adaptive capabilities.

Given these observations and experiences, I want to raise bigger questions. Why does Ken Robinson's story inspire so many educators, yet it's not followed up much? How come so many young people, wanting to make a difference³⁵, end up doing and being more of the same, despite new technology, new trends and new troubles? Why does it take education so long to adapt and cater to

a changing world with deep troubles at its core? And perhaps most importantly: how and why is education part of that problem?

WHAT GOES WRONG IN CURRENT MAINSTREAM EDUCATION

What do we³⁶ actually teach through the way we educate? The way we educate is training in itself. You, as a student, have to listen and acquire a government approved viewpoints³⁷. You basically learn to see things and act accordingly to the way your government and/or school thinks the world works. When you succeed in doing so, you are deemed worthy to climb the corporate or government ladder, as you have shown willingness to comply with their standards to be successful. Most of us consider this normal.

Over time I met so many young people talking about their studies as if it was a portal to conquer the world. I once saw a student talk about how hard he wanted to work to get the same big car a business owner had waiting for him outside. The business owner smiled and being blatantly honest told the student: *"You think hard work will get you that car? You will work hard, boy, and end up making me richer. But you look at the car and don't see the price I paid for it: two failed marriages, lost sight of my children when they grew up, and I also have a heart condition. Not knowing my own children is what hurts the most."*

Meanwhile, companies around the world spend billions to make up for what has been lacking in education, on training and coaching. Students dream of important jobs and what do they have to offer for it? Being able

to give the right answers at the right time. Many students really think that the better they comply, the higher they get. But the whole concept of work life being a pyramid, in which you have to compete yourself upwards, has four major problems.

Bullying increases, where the idea of competition, and thus, of winners and losers within the competition is embraced. Stu-

dents will understand this as ‘*Pull yourself up, by pushing those down, that you conceive as in the way to your success.*’ More pressure, more bullying.

Everyone who might become self-employed and/or start a business is not trained to think for themselves, nor builds the self-discipline to get themselves out of bed every morning. Schools mostly cater to employment in bigger organizations.

Most people just want a good job, enough income to feel safe (Maslov) and spend time with friends and family and things they care about. That doesn’t make them lesser students or people, for that matter. There’s madness to everyone really aspiring to get to the top of the power pyramid, even at the cost of friends, health, and lives of others.

And at the same time some very real troubles on our planet are hardly addressed, or are made clear how each of us is part of them.

Of course, most of this happens with the best intentions, and many educational ideas of our government do make sense. Then what happens? Logical choices towards a better education are built upon logical choices that once made sense before. Together they slowly piled up into this limited (sickening?) system. To me, it’s very sad many students don’t feel free to speak of their own dreams and rather prefer to play along. I feel we need a big change!

Education should stop paying lip service to the problems in our current society. It tells students they’ll be free from trouble through ambitious bickering upwards. It tells them through that push to accept all side effects of our belief systems as normal. Yet all those issues, such as pollution, war, poverty, infant mortality, global warming, corruption, human traffic, banking scandals, etc., won’t change when we prepare young people to bring more of the same! Thus education only delivers a shadow of what it’s supposed to do: to educate people to become valuable contributors to their community and the world, improving it beyond current damaging standards.

Educational systems, thus, mainly protect the current status quo. That is a hard statement. And it may hurt a lot of good teachers. I know many

in education work with hearts of gold. They give life, love and the best they can to our next generations. Yet, they also follow the ruling paradigms, sometimes fully convinced, sometimes crying and resisting, rebelling as best as they can. Often they feel or are caught in a web that has a craziness and life of its own. And I claim this craziness threatens the life on earth, or at the very least the future of our society through lack of body consciousness and overview in education.

It’s time for a revolution in education. In this essay, I hope to show you what price we pay for this approach to learning and what way out we must seek. I believe in young people as a source of potential that can hugely contribute not only to their own life and that of an employer. I hope to offer the outline of an approach that can bring more light to our whole world. Or as someone once told me: *“You are not crazy to wish for more wisdom, playfulness and love in education. The whole system is crazy for the lack of it.”*

HOW THE TROUBLES OF THE WORLD ARE ENHANCED BY OUR ‘EDUCATION’.

So how are our big issues and education related? The first thing is that education gives us too colored and narrow glasses to look at the world. We stay silent against the slow poison that hurts us all. We scream when a few differently colored/religious people from a minority act with physical aggression. We don’t look well enough into our role in the whole system of conflicts and damages around the globe. We should. This may become more comprehensible when we consider the ‘propaganda education’ terrorists get, or children of countries we somehow need to consider as ‘enemies.’ They get what we consider nationalistic bullshit and lies. Of course, we ourselves don’t do that. Or do

we? Don't we also consider 'others' to be weird and ourselves as 'normal'?

More and more worrying amounts of ecological damage are done to our planet³⁸. Even when the intentions aren't evil, things aren't improving fast enough. *Profit maximization* and *amorality* (meaning when the law allows it, it's okay, even though we know it's bad) are two big drivers³⁹. And that's not even including companies that push (sometimes as good as run) governments to make laws in their favor. These two factors keep on pushing companies to keep on enlarging sales of products that in production, delivery, usage and/or disposal do damage to our environment and society.

Our children flow into this system like new screws, bolts, and oil, all to keep the motors running. Thus, 'our education' is co-responsible for keeping this system unchallenged and creating the 'monsters' willing to help sustain or create socially horrible working conditions, wage wars, arrest protestors or just deliver bad service, all for the sake of profit.

Is that what educators want? Is that what they should do? Yes, you could say. There is plenty of us who find positive jobs, do good and help improve the world. When we consider the damage and fear one terrorist can do, we should also look at those students that run forward to become such negative impacting managers, all as a surge for a 'great career' and 'making big bucks,' which too much of education tells them is what they should strive for. Daily millions of our ex-students help their company, boss or shareholders to 'get away with it.' They will even lobby contrary to their own research findings, or manipulate findings and products if those might damage profits. Volkswagen, van der Moolen, Shell, I'TT, Dow Chemicals, Anderson accounting, Monsanto, Nestlé, Privately Owned Prisons - many, many corporations have been a part of huge scandals. Millions suffered because of cover-ups of asbestos, smoking, milk powder and bad medicines, because of the wars planned by others. The 'others' mostly being, perhaps even well-meaning, manag-

ers, who made a choice that they don't want to suffer the consequences for themselves.

I ask you, what kind of people would do these things? I believe none of the amoral acts above, even when totally allowed by law, were consciously promoted in education. It's just that education breeds the logic that prepares us to think it's normal to collaborate in projects that have these effects. But why? We, in the West, consider too much that our objective in education is to keep 'our economy strong' and educate people to seek good careers in that economy. We have to be honest with ourselves. This approach too is full of equally misguided self-justifications. We have to wonder if we really tend our interests and our common future through the way we educate our children. I think not.

So why do we tell students that to aim to receive bonuses and promotions means you are doing well? This is because people trained to give the 'right answer' will not question their employer. People who never taught to think critically will blindly further the interests of company's profit, or the 1%, as many call it now. They will stay obedient to the system, their bosses and regulations, and if they are 'well educated' it helps them to be even more effective in it. We train children that the interests of their country, religion

or corporate job comes before the well-being of everyone and the whole. This is all because of our vision of what a 'healthy' economy looks like, and because we teach that 'our interests' come first. Because we think competition with 'others' is what makes us better. And as the consumers of this 'system' we happily buy daily goods and services from these companies with our wages from these same companies and thus support this system, that damages people, society and nature.

It's even harder to change now that we have created an environment where corporations often gain more power than governments. The power they use to further and protect their interests, whereby they daily send lobbyists to the capitals of countries around the globe to pressure governments to regulate the econ-

omy and education towards their interests. Where they basically say: *“Hey, if you want your children to have a job in our pyramid of power, train them to play along very well.”*

Why can't we change it? New ideas like Cradle to Cradle, win/win/ win are abound and many solutions for environmental energy or products are available. We all know we must seek change if we want to avoid huge future disasters when we stay on this path. We must create education that questions deeper what and how we are contributing to what. And help develop adults who seek to contribute most positively to a planet that flourishes for all and are completely willing and knowledgeable towards the changes that might need to happen soon. That's why I call us to reconsider all education that helps to create the conditions and sustenance for our destructive relationship with our planet and cultures around it. It doesn't make sense to educate in the same a way we continued until now, knowing it is ultimately wrong and damaging. We should help young people to be part of the solutions and reply to the consequences of what we created without being amoral. We should accept that on this planet there is no 'other' anymore.

When the Germans were confronted after the war with the reality of the concentration camps, most claimed they hadn't known. Our 'we-don't-want-to-know' seems worse. If education is about opening eyes, then bigger reality has to be included. The environmental danger our lifestyle brings to the planet has to be addressed. And this is not just professional preparation. For we know that all the mentioned troubles and dangers are affecting us in return. Issues like war, banking crisis, lack of clean water and global warming will impact our daily lives. The more our whole system becomes an integrated complexity, the easier one little accident elsewhere can hit us at home. We're all in the same boat, and it's sinking if we don't repair the it all and not just our own side of the ship. We all have choices on how and what we will contribute. We need to educate our students to understand this and only then think about jobs or businesses to start.

THE NEED FOR BODY AND OVERVIEW

The end doesn't justify the means anymore. So how and where to start changing it all? For our shared future this century, these four aspects are frequently named as essential for young people:

Critical thinking (how to be critical, how to question and re-search our own role in the bigger patterns that shape our world amidst an overdose of fuzzy media and messages).

Communication (how to connect, understand and express messages and meaning).

Collaboration (how to work together, instead of competing about and over everything).

Creativity & Courage (how to create the new, according to real needs and question habits, assumptions and damaging rules).

These four should help students to become part of the solution that contributes to a better, more healthy whole. And that health should start at school. So how to start teaching those aspects? Let's start with **body** and **overview**.

Let us begin with the shocking amount of children on heavy medication in schools, others dropping out and getting burnouts. Huge numbers of children don't feel any support, only pressure to 'get good grades.' Pressure to conform by showing mastery at it. Only when they've shown that mastery and absorbed the standard convictions as 'right,' are they allowed to develop their path within the box that is now set. Clearly many students suffer from the pressure, perhaps even the intention behind it. And the pharmaceutical companies love to offer their solutions: pills like Ritalin.

Even common sense tells me this is madness. Then why do these companies push these sales? Yes, for the profits. Yet, why do these come first? They come first because of the disconnectedness from life by the managers and salespeople in these companies. We've already seen that the push for profit overrides human sense.

And like those managers, we train our children to do tasks disconnected from feelings. Indeed. Doing rows of math problems I

didn't care about, did exactly that. To make these rows of sums I had to disconnect from feelings, from the body and from the overview. I only had to focus on one dimension and apply reasoning in a very narrow frame. My father called my resistance a lack of discipline. I call it training a dog to do the trick that is not in sync with its nature.

So here we get to the two most important aspect of starting the change. Connectedness with our own bodies and overview of how the big system runs. We gain freedom and more options in our lives from such overview and the presence in body and soul. From there we'll make choices that include everyone - self, people and the planet,- way easier.

THE IMPORTANCE OF THE BODY IN LEARNING.

In much of current education only the mind, and only the rational part of the mind is addressed. Whenever you do a task that only speaks to the mind, not the heart, that has no meaning but repeating and stamping in lessons, the soul suffers. And we do this kind of training, we do it during our whole school life with every lesson and every task that is only mental and doesn't include our heart. No wonder the body sends signals of unrest and longs for action. So how come we seem to understand so little of this?

This 'training in disconnection' then shows (as in the case of my class on social activism) that even though we paid attention, we couldn't feel how it all applied to our lives. I claim that exactly this dis- connectedness creates managers and leaders who are disconnected from feeling how their decisions impact them and others. People, who make decisions that may benefit business, harm people and planet.

Recently some scientists 'discovered' that if you let children play a bit more before they get to 'work,' they become less unruly and concentrate better. Their question must have been something like "how can we get a better concentration in class?" Frequent

time for 'a bit of playing' in their minds helps children to behave more adjusted. Sorry, to my mind, these guys have no clue about what is more essential here. It's being physically present with heart and soul. Some regulated spaces for dancing and playing don't not help to get better concentration; free dancing and playing is learning itself. By acting out and by expressing through the body we learn better, our learning becomes more integrated and we become more socially aware. And through the body, actions must have a heart. To teach with that in mind, we really need to redesign education: Math by stepping and trading; measuring through the building; history through role play; language through acting, game shows and debates, and with our body present, we 'feel' the impact of our choices on ourselves and on others. That makes the way for more balanced and human-driven decision making.

One of my studies was in acting. I learned there that acting skills not only awaken the body, they also train how to learn through the body. New studies point out that in our torso we may have a neurological network as complex as in the brain. The body may have a mind of its own, scientists now claim. Niels Bohr discovered that some physical reflexes are acted out before the signal hits the brain. I think all dancers, actors, sportsmen, acrobats and such, lived this reality through the centuries. Chinese, Indian and many aspects of indigenous belief point in similar directions and have shaped their approaches to healing, medicine and philosophy. Martial arts training, for example, teaches you to integrate physical techniques so deeply, that your body will be able to perform them instinctively. And this learning, they claim from centuries of experience, actually leads to more wisdom. Wisdom through educating your relationship with your body.

People with better body relationships are more healthy, they earn and cooperate better. I totally believe this. I experienced it myself as I grew from a shy, very meagre student to a fast learning very good student as my physical awareness expanded. And while this may sound as common sense, which it is, science has

a hard time measuring it. For many scientists, strangely, this doesn't count as a proof. The strange thing is they seem to try and prove it, without experiencing their bodies as a sensor. This is madness. As if children are born to sit still and devour information. No wonder more and more children are on medication because they are unruly. We know that with more space to play, more time to be physical, many of those complaints disappear. Sadly those advancing this approach can't yet beat the lobby power of the pharmaceutical giants that profit from the current status quo⁴⁰.

THE POWER OF PLAY

Once at a lecture I said: “**Measurability is a war crime.**” I felt I went a bit over the top. After the lecture a woman came up to me and told me how right that statement was. She added, to the downside of the one-dimensionality of measurability, the pressure is put on millions of children around the world. The pressure of proving your progress according to predetermined expected outcomes has become a major reason for suicide among young people⁴¹.

While some educators might deem such children too weak ever to become a success, I prefer to put the whole system of measurability in question. Consider in your life all the things you learned without even consciously learning them. Just wonder what can you do now? Skills you once wondered you had if you'd even be able to perform them? Consider your most important lessons in life. See them flash before your eyes. Where and how did they occur? How much of it in school and how much outside? And which ones occurred in school in spite of its intentions?

Might the wish to learn, and life itself, be more powerful than the (governmental approved) methods? Might result in stress damage certain qualities such as compassion, care, and sensitivity? Qualities we have that could be a boost when accepted and embraced by educators.

THE IMPORTANCE OF OVERVIEW IN LEARNING.

While in Vienna at an educational conference, stEFFIE⁴², a young student of 16 asked the forum, full of experts and politicians: “I only hear you talk about preparing us to get good jobs and fulfil them. How about preparing us for our whole life in this (fast changing) world?” One could feel the whole room longing for a helpful answer from the forum. It didn't come. They seemed to have no clue. This is because current education seems to prefer offering answers to known demands. It doesn't know how to train for unknown, for a fast changing world, for living a meaningful life outside the borders of the profession or skills they train. Where could training for this come from?

The second aspect - overview, real impacting overview,- is what astronauts get when they see the earth from space. “Earth is a space ship, and we are all crew” is a very fitting saying. When one trains towards real overview, instead of professional preparation, it becomes so easier to shift with new knowledge, adapt towards new issues or keep the whole in mind when one makes choices.

Of course, there are many valuable jobs to prepare for professionally. Many at work contribute to a healthy society, but not nearly enough. Too many young starters who enter the job market, seem to think of having and finding a job is all that matters. And then often there is no job, or they haven't got the real skills needed, and the market changed faster than their university anticipated. A lot of young people around the age of 27 even get a burnout. For many jobs seem to be devoid of meaning to them.

This ties into the big question Sir Ken Robinson asked in his most famous TED talk: “Why do schools kill creativity?” This question was: “How do we prepare young people for a future we don't know yet?” Internet gave many young people access and a sort of overview of what's more possible. Yet, schools mostly train for a steady job in a steady market, even if it's a new job, like working in new media. Many young people feel huge gaps between what

they worry about in the world and what they actually are doing. Apathy, cynicism, depression, anger, escapism, belief in conspiracy theories or other captivating, even fanatical, beliefs - all can be a result of those gaps.

THE BLESSED UNREST

The good news⁴³ is that there are also already millions who care, who act and who try to prevent war, ecological disaster or inhuman ways of trade of politics. Yet too often their ideas are seen as disturbing (Occupy), treason (Edward Snowden) or not serious (the idea to make energy in all houses neutral is very possible, yet bad for big energy businesses). What we should see is that many protesters shout to change a system they feel is unfair. Is the care⁴⁴ these protestors show have to do with their education?

A good number of inspired, aware teachers may raise real issues inside the class. I guess most just rediscover the care they felt as children, for the world around them. Mostly it's outside school that young people freely talk and wonder. It's when they meet new people in new circles when they start to raise children and look around. And to put their new found ideals in action they need to work mostly outside of the system to make an impact. Yes, much of the real work to make a difference is done outside of the system we prepare our students for.

Individuals start NGOs, raise money and create movements. Only later, when this amount of positive action became huge, did education discover job preparation for the NGO system. Yet, that approach is the same as for other jobs. You do work with a target as best as you can. Thus, sadly, in attitude, a lobbyist from Greenpeace may not differ much from one from Nuclear energy. Hence, many NGOs are part of the system. Their play boundaries are being set by governments and corporates who decide on the funding. So many NGOs are, sadly enough, even part of the problem⁴⁵. Help in Africa, arguably, also broke many things further down.

So truly making a difference is a very complex thing. And most schools don't help you question what it is to look for new possibilities, let alone help you find new solutions. Though, I'm happy to state this is changing. In many corners of the internet you'll find uplifting news reports of those who gave it a shot.

THE IMPORTANCE OF AWARENESS AND UNDERSTANDING

Still, most schools seem to kill all desire to care or make a difference. Where many children in primary school worry about nature, war, the environment, people not being nice to each other, around the age of 12 most of them seem to stop caring, become cynical and/or start to focus on their own careers, giving up on having meaning for the bigger whole.

Now, I can imagine some of you wondering about this. As stated before, there's an essential difference between preparing people for a job or work, and on the other side preparing them to live a responsible and contributing life in their environment. What is the difference and how can we deal with it?

A large part of education has a big impact on our ability to connect with ourselves, nature and the shadows in society. It disconnects us from ourselves and the bigger picture. Whether done on purpose (if you like conspiracy theories, go ahead) or as a side effect of the overwhelming attention for mental knowledge input that I leave aside. Take doctors being trained in medicine. Their training in the context, like in the work and dangers of the pharmaceutical industry, in the human approach to patients, is weak. Alternative health care is thought to be distrusted as unreal, while the chemical placebos of the pharmaceutical industry are no different to that claim, only more chemical and unhealthier. So why are the alternatives attacked as unscientific and the corporate placebo as the 'real thing'? Also, since managers and insurance companies have discovered how to put a price on lives, doctors some-

times have to refuse help, because of cost regulations. How do we deal with these questions if the topic hardly gets any attention?

Then there is fear. Fear is a big issue. He, who protests frames and regulations that feel unjust, gets fired, in some countries even arrested. And we fear getting fired, for we have learned at school that having a good job makes you a valuable person. Companies and governments consciously seek to imprison people in jobs and structures that make people fear to challenge the status quo; a status quo that ravages the planet and is unsustainable. So how to help rethink what is possible? How to make us all more aware and act with care?

And here is a paradox. I feel pressure to work more consciously on income, and at the same time, the whole need to secure my own income, while contributing to the bigger whole seems unfair in the light of all those that only secure their own income at the cost of others, including the planet⁴⁶. Should we stop helping because there isn't someone paying for it?

THE DEEPER STRENGTH OF A 'HIPPIE' APPROACH

The two deeper terms that body and overview lead to are **connectedness** and **love**. Education without either of them is devoid of reason. This may sound illogical. Yet, I think I've shown enough examples of how the global amount of disconnectedness that stems from a lack of physical presence and a lack of overview create harrowing choices in all layers of corporate and political life. Love and connectedness make us essentially (feel) more human. Think about music that helps you feel alive and be part of something bigger. Think of moments when you experience glory, breakthrough, being deeply touched, moments when everything made sense, or when you felt it was all worth it. Those are the moments *when love, connectedness, and meaning come together*. Creating the possibility for such feelings should be a core of education. It's where the intrinsic longing to contribute is born. And it helps to

deal with the pain we meet within and around us when we open our eyes to the current state of the world.

Being in touch with your own body, with your intuition towards our 'leaders' and dominant beliefs helps to see the many discrepancies that surround them. Yes, being connected may hurt when you and/or others suffer. We should not shy away from this. Experiencing pain is the first step to healing. Being able to connect on deeper levels also improves relationships, real relationships. Human warmth grows and with it empathy, care, warmth, and love.

Sensing and knowing about the bigger patterns that the overview holds, brings more care for the whole and more willingness to contribute to that whole. It enlarges the longing to be a 'crew' of our living planet. Some big corporations seem to fear this, but actually it is also in their best interest. A company that truly cares about the environment will keep it alive, and thus keep future profits and future clientele alive. It is to look for a real long perspective forward in time. And use the imagination to *'unfold the better world our hearts know is possible'*, as Charles Eisenstein put it. That world can only be born out of the deep love when we all carry for our planet. That world will only work when the heart is invited and ignited in and through education. For the root word of education - educare - originally means 'to grow from the inside out,' not 'throw having knowledge in it'.

At Knowmads we educate through exercises that help people discover their own answers. We assist them in trying stuff out and failing a lot. At our school, it's okay to replay levels. For we find no tests are needed (nor are they given), as life itself is instructive enough to what works for real and what not. I've been rewarded with students claiming this was the best choice/year/education of their life. I've seen people develop their own job/business/project/destiny based on what they felt called towards to. Our students started companies around ecological catering, process facilitation, visual harvesting. Others started jobs as process facilitators, innovators or even made a career as singers and

songwriters. One girl went back to fashion design, after leaving the same job she called ‘days filled with pointless drawing’. When asked why, she said: “Ah, but now everything is different. I now don’t work to please my boss. I work according to my deepest values, listen more to my intuition and stay true to what feels healthy to me. And my boss is very happy with that, for through these aspects I have also grown so much in my work.” That’s the difference personal empowerment can make once integrated into education.

HOW TO BRING AND IGNITE LOVE AND CONNECTEDNESS IN EDUCATION

I am convinced the following eight basic approaches all enrich life, stimulate the soul, stimulate the presence and aliveness. They all help to connect deeper and understand more on deeper levels than knowledge alone. All these aspects are being trained around the world in mostly non academic situations, and millions benefit from it. They are all approaches that have centuries of culture behind them, and thus are developed through the wisdom of generations.

Bring more **Arts** into Education. Art is ambiguous. It helps us to consider and reveal a deeper view of what is an imaginative view of what may unfold. Art demands relation, where plain sums only demand mental focus. Art doesn’t make you repeat what other tell you, it makes you question and expresses your own relationship with the world around you.

Bring more **Body** into education. We need to stuff the brain way less when we start listening to our intuition. A better relation to your body makes you more aware what is healthy and what not and improves relationships around you.

Bring more **Nature** into education. Absolute growth does not exist. It’s all about cycles and relationships. Nature is what we essentially are. Being in and with nature reflects our relation to what

is essential. It helps to relate and understand the bigger whole we are all part of, with way more senses than the mind.

Bring more **Reality** into education. Talking about ‘other people’ as objects is quite different from actually meeting them. Solving conceptual cases is very different from helping real people with real questions. Schools and their students often have played big roles in their communities and can do so again.

Bring more **Play** in education. It is the fastest, most integral way of learning. It is deep, multidimensional and goes beyond understanding. And it is fun, activating & self-regulating.

Bring more **Wisdom** in education. After facts comes knowledge. After knowledge comes insight. After insight comes capability to implement. Experience with implementations develops wisdom. Wisdom is understanding and relating to the dance between personal, local and universal principles.

Bring more **Collective Intelligence** in Education. Others already know what you seek. The answer is present in the air. Helping each other progress rather than compete makes students teach each other. Teaching is the best way to understand and grasp the material and makes us less dependent on others.

Bring more **Love** into education. Bring love as a teacher, love for the students, the material and the whole planet. Stimulate love for questions and subjects outside the program, for love boosts intrinsic motivation. Boosted intrinsic motivation always leads to more questions and more eagerness to learn more.

All eight approaches will suffer, however, seemingly already present in current education, when tested they are disconnected from each other⁴⁷. They suffer when applied as measurable steps and methods. The how to work with them is as essential as the why work with them. It is to make these approaches come alive as they can come alive in students. It’s about adding wood to the fire within people to ignite wonder, curiosity, sense of love and beauty and the feeling that your life matters. Even when you are not sure: life is a mystery, and you have a purpose.

EMBRACING UBUNTU

When we get down to it, we must admit that we are a part of a bigger system. It's all Ubuntu: "I am because we are." We can only achieve global peace when everyone wins when everyone has a fair part in sustainable conditions. Our planet will only keep on sustaining us when we help the nature and the people in it grow, bloom and unfold, but not seek to damage it less. We need us in our profession to help with that. We need organizations, laws, economy and politics who see this as essential and normal practice. We need to accept, acknowledge and trust the need for diversity in cultures and nature. There is not one answer or approach. Diversity in nature always keeps options open. Monocultures, in plantations as well as in cultural uniformity damage the environment as it blinds cultures to their own faults. We need to learn from those who are clearly not 'us', yet at the same time not 'them' either. For, as stated before, "Earth is a Spaceship, and We are all Crew." So education should train us to be a crew. In and through our work we should serve the bigger whole of all life, within and around us. We should not trust our workplace to do the thinking about this for us.

I follow this path. I have connected to so many other humans who long for and act towards alternatives, and contributing to that is what deeply matters to them. I have discovered fulfilment in being part of that. So when you step on this path as well: life will not be boring, nor will the work be meaningless. When we open our eyes through the eight basic approaches life actually becomes magical. We can start to wonder and to be amazed again. This means connectedness on deeper levels is opening up. And when we live with wonder, live to contribute to the 'bigger whole,' we may find we can connect deeper to everything. We might find that all existence actually is an expression of love and that we too have the power to contribute to that expression. We will become part of a bigger dance, however big or small our role is. To help everyone dance this dance is what we should navigate education to. Start the music.

OUR POSTER FULL OF QUESTIONS TO OUR SCHOOLS AND EDUCATORS.

Dear educator. I do love your work with us. I too think you are paid too little, compared to the managers in our school and government. Let me ask you these questions. If you can't answer them, can you please ask them upward and sideways in the organization? Sideways too, so we all come to know we are not the only ones who worry and want to learn more and deeper than we think and than we currently get offered. And please remember, A: this is not an attack on your position, this is an invitation to improve. And B: we are actually the clients here, even when obliged to take part, you offer a service helping us prepare for our lives.

So can you help us improve that service for our future and for the world that depends on it.

Why do I have to show that I can excellently memorize preset answers when life is so full of ambiguity, a diversity of options to each problem and the internet offers thousands of facts within seconds?

Why should I see high scores that help me get a corporate job or academic title as the most aspirational point of my options, whereas my ideals, dreams and visions for my own life are hardly noticed, nor are they acknowledged, nor stimulated, let alone invited in my school projects?

Why are there no lessons on constructive rebellion to create the better world we dream of, let alone to focus more on critical thinking about everything offered to us? We need that kind of thinking too, because we are getting lost on the internet amidst a huge amount of lies, misconceptions and PR manipulations and temptations.

Why is it that people with academic studies know what is good for us, and we, who actually are living our own lives don't get involved in the decision making processes? Is that A: We don't trust ourselves. B: We don't think we are capable. C: We fear it might

become too complex to manage. D: We would love to, but fear our managers above us. E: Other...

Did you know Einstein said “Imagination is more important than knowledge” and “Play is the highest form of research”? If he’s such an icon in science, why then is knowledge considered so much more important in school? Why then don’t we ‘play’ research more?

How come we consider play as a disturbance, when we consider it is how nature invented learning for mammals? Why aren’t we seeking how to play if we know that action and experiential learning could be a much bigger and fun part of school?

We wonder if it’s okay to blow these questions to poster size and hang them in all the classrooms. If that is not allowed, why not? What do we fear might happen? Is that for their interest or ours? If yes, would we help translate the questions so even the youngest in our school can understand them? And how can we be helped in asking these questions to our management?

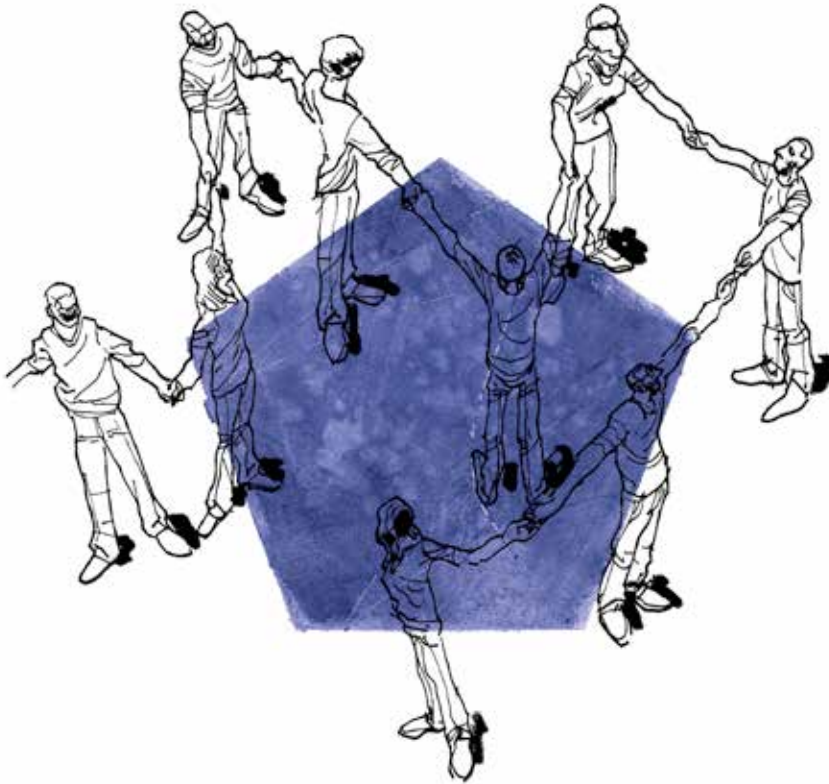
Did you know school comes from the Greek ‘time for yourself’ and education from ‘developing from the inside out’? Isn’t it strange that the school is organized as ‘obligated and regulated time’ to put mostly information ‘from the outside’ in? How can we get more time to unleash our intrinsic motivation for our own interests and develop them from the inside out? Don’t you think that might increase diversity in outcomes and give each of us more to look forward to, to come to school?

Dear parents. Do you see me, or us, suffering at school? Do you worry about me, or us? Are you aware how many other kids suffer too? Would you dare to believe it might not be the children who don’t fit, but that it might be the whole system that doesn’t fit too many of us? Do you think all the testing, all the pressure is too much? Do you think the lack of personal growth is too little? If you answered yes a few times, will you help change the system, so that it fits us? Seek out other parents and support organizations that bring these issues to light?

Do you see my teachers work overtime and give their best to make a difference, and yet feel they have a hard time too? (If not, and you experience them as bitter old child damaging punishers, please help them leave). Can you help them stand up to the school inspection and to their bosses and help them demand better service, better tools, more realistic and current world curriculum so we can face our future when it comes?

A NEW SOCIAL CONSCIOUSNESS

Galorian



Now we have the tools and the technology as to reach a collec-

tive awakening as to grow the circle of “We” and solve our society’s challenges together. Step by step and soon enough money, social systems and education will be democratized by fully utilizing the power of the web.

The need for universal morality is real. Humanity’s survival is closely related to solidarity and cooperation among all people.

HOW CAN A UNIVERSAL MORALITY ARISE AND SPREAD IN SOCIETY?

Traditionally, determining rules of morality was provided by religions. The Ten Commandments of the Jewish and Christians, tenets and principles of Muslims and life of Buddhists are just examples. Nowadays, the hegemony of science has reduced the power of the religious teachings instructing humans how to behave, and many look up to science to receive a practical guidance. Surely the time has come to consider seriously the new values accepted by everyone, regardless of faith, religion or origin.

“Some people see things as they are and ask why they dream of things that never were and ask why not?” said President Kennedy. To dream of a world as you would like to see it doesn’t mean tto

entertain delusions.

“Never doubt the power of a small group of people to change the world; no one else has managed to do it,” said Margaret Mid. Mahatma Gandhi was even more emphatic: “Be the change that you want to see in the world.” They were right. When you develop your awareness, you have the power in your hands to change the world.

WHY DOES CONSCIOUSNESS HAVE SUCH A GREAT POWER?

The explanation is simple: in a decision frame even small “fluctuations” can change the fate of the system. A fluctuation in the form of a more developed awareness is very powerful. More evolved consciousness means new mindset and is the key to a new civilization.

Nowadays, more and more people acquire new appreciation and respect for nature. They develop a sensitivity for human beings and discover that differences between people in various fields, such as sex, race, color, language, political conviction or religious beliefs, are not a threat but are interesting and enriching. These people understand that other people, whether they are neighbors or whether they are overseas, or of generations yet to be born, are not different from them and there is no room for indifference concerning their fate.

WHAT SHOULD WE DO?

We must begin to focus our minds on the fact that we are parts of one whole system that includes all human beings, and begin to treat others accordingly. An altruistic attitude to others means turning your intention, your thoughts and your concerns for the benefit of others; wishing all other people to receive all the necessary for their existence. But beyond the widespread concern to

welfare, it is about concentrating your thoughts to raise the level of awareness of others. You should desire that everyone will feel part of a single over the whole system.

This is, first of all, an inside job at the level of thought. It is important to delve into this idea and do not let it go away from our minds, as surely to happen. We must regard great importance to such thoughts as our happiness and our peace are dependent on them, and with their help, we can survive all problems. Though, the issue seems abstract at first, actually in it, and in it alone, our good future depends on.

Apart from the altruistic attitude towards others at the level of our thought, we can also practice altruistic action, such as sharing with others our knowledge about the purpose of life and about how to implement it. If we shared the importance of this awareness with others and now they share even some of it, recognizing the problem and moving towards a solution, then we caused a positive change in the same system that we are all parts of. As a result, our awareness will intensify more and more and we will sure enough to feel these positive changes in our lives.

One person that amends his attitude to others is making a difference in humanity as a whole. In fact, it is possible to draw the relationship between yourself and the rest of the humanity: you and all humankind are in the same system, but everything else depends entirely on the way you interact with it. The whole world is in your hands.

Remember! A society that values caring and compassion have the greatest importance and soon enough becomes a more just society.

Creative mindset is not only about care and compassion. The technological distance that separates us from animals doesn't make us more human than we already are and it does not differentiate us from them. The new collective mindset is about the creative awakening that leads towards justice and integrity.

We have specialized in learning, in associating and a lot in im-

itating. Altruism, generosity and cooperation are traits that define us as humans. We reign supreme, able to do the very best and the very worst, love and violence, good and evil, we have conquered the world, what's next?

THE REALIZATION OF FREE CHOICE

If we wish to change our relation to others from egoistic to altruistic, we must bring ourselves to a state where we want to care for others and to make sure this connection will be much greater than any other egoistic purpose. This can happen only if the values of our society position altruism as a supreme value.

We were created as egoistic social beings, and for us there is nothing more important than the opinions of those around us. In fact, our life's purpose is to gain appreciation and praise of society. We are strictly and involuntarily controlled by society's opinion, and are willing to do everything we can for some appreciation, recognition, honor and glory. Therefore, society can infuse its members with values and different behaviors, and make those more abstract.

Society builds the standards by which we measure our self-respect and self-esteem. Therefore, even when we are alone, we act according to society's values. In other words, even if no one will know of a specific action we have done, we will act to feel positively and our self-esteem will grow. For us to start building the will to care about the good of others and establish a connection between us as parts of a single system, we must be part of a society that supports it. If the people around us appreciate altruism as a supreme value, then each of us will naturally obey and adapt it to themselves. If we aspire to be in a better environment, our inner strength will eventually lead us to people, organizations, guides, books, or in one word, to an environment in which we can evolve. The more we focus on the idea of improving the environment and trying to apply it in our lives, the more possibilities will open for

us to realize it. When our environment is comprised of people who are also drawn to achieve social balance, we can see an example in them, encouragement and strength. They will understand that we want to treat them with love and will allow us to learn how to do it.

As more and more people start acting toward a just relationship between humans, their action will become to be the public opinion, and public opinion will have affected everyone else. Due to the internal connection between all of us, every person in the world, even in the most remote locations, will immediately begin to feel that he or she is connected to all human beings – he or she depends on them, and they depend on him or her.

We cannot change ourselves directly, but we have the power to improve our environment. We are certainly capable of that. When the environmental impact on us changes, we change. The environment is the crane lifting us to a higher level. An individual investing its power in choosing and creating the right environment required for their development can realize its potential through it. The understanding of this principle and its implementation requires a high level of awareness, but it seems that nowadays many of us are already there.

As we join together, forming networks of human concern about the future, we will find the strength and wisdom needed to create a better future for all.

RISK OF COLLAPSING!

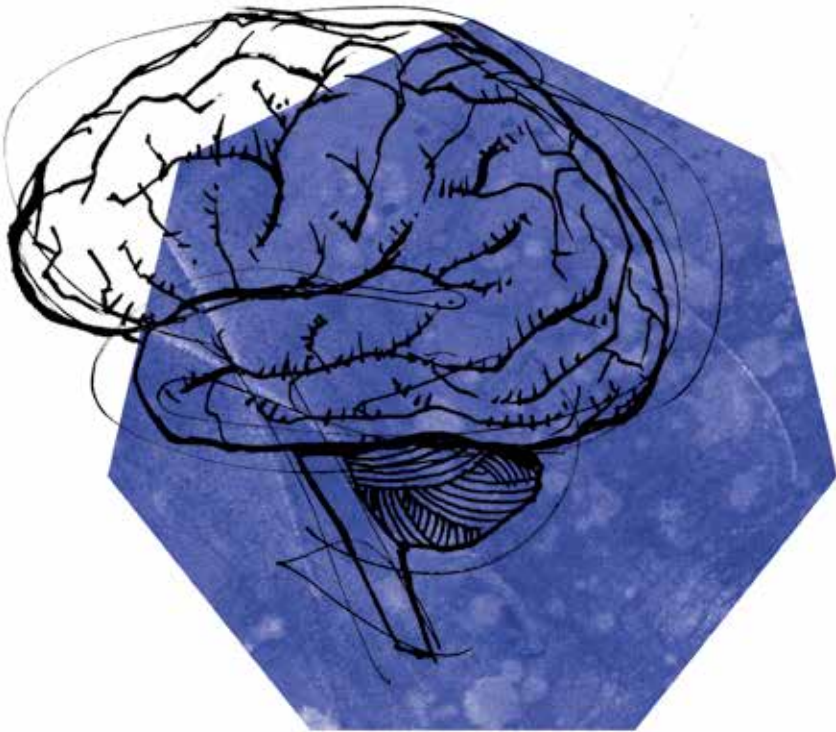
HOW A MODERN CONCEPT OF
LEARNING SHIFTS OUR EDUCATION
SYSTEM.

Gerald Huether

Why do only so few people experience learning, the associated enrichment of life and their own further development enabled by learning as deeply joyful and exhilarating? This is my key question of this article. There is much to suggest that the way in which learning is still being defined and how we classify it in our lives is transforming the innate learning habit of man into learning frustration. Why?

We have imprisoned our notion of what learning is in the narrow framework that institutions created specifically for the purpose of learning pretend. There has been a definition of learning out that goes far beyond what the ability to learn actually means: From a biological point of view, learning means nothing but staying alive. Whoever cannot learn anything more is dead. This is true not only for us humans, but for all that lives.

What is happening in the majority of today's educational institutions is determined by a concept of learning that is fundamentally questioned by the new findings in biology and neurobiology. The old notions of learning are still firmly anchored in the minds of most people, including those responsible for education, and have now become shackles that prevent any further development.



In order to open up this idea and to free our thinking and actions from the encompassing of a concept of learning which is only related to school learning, I will present seven theses that illustrate learning from a biological perspective and make a central conclusion: learning is not just an expression of liveliness, but also their presupposition. Those who try to steer learning from the outside suppress precisely what makes learning come to life: the joy of learning – often even for a lifetime.

Seven theses on the extension of the present concept of learning

THE EVOLUTION OF LIFE IS AN ONGOING EXTENSION OF THE LEARNING ABILITIES OF LIVING SYSTEMS

Learning is not an achievement that we humans first invented; to be able to learn something, you don't even need to have a brain. All living beings, even the most primitive bacteria or single cell organisms, have to be able to learn whatever is of importance for their survival – each in their special way, because life means establishing and being able to maintain over and over again the just found stability with all its structures, mechanisms and relationships developed for this purpose despite constant changes in the form of disturbances and threats. Each living being has to be able to do that; otherwise, it dies – be it a blue algae or a human being. These unique reactions to disturbing or threatening changes within their respective life spheres are achieved by all living beings from within themselves.

However, the scale of what single cell organisms can learn is fairly limited, but they all have to be able to learn a bit. otherwise they would be threatened with certain death as soon as a disturbance lasts for longer periods. What happens inside this single-cell organism is not all that different from what happens inside a nerve cell, when it gets permanently bombarded with impulses from other nerve cells. Certain genes are then increasingly

being written off; the related protein sequences are increasingly generated and delivered in the form of enzyme proteins and structural proteins.

The cells of a multicellular organism also learn to adapt to specific circumstances in a similar, but a bit more complex way. In this case, other cells, with which the affected body cells and nerve cells are closely related, cause the persistent disturbances. For example, a liver cell learns in this way to survive despite continuous alcohol consumption. Or a pyramidal cell in the frontal brain lobe learns how to react to the constant release of excitation transmitters from the pre-synapses of the surrounding neurons. It can do this, for example, by increasingly growing axons, at whose ends it will release transmitters that will inhibit all the overexcited neurons bothering it.

This applies not only to multicellular organisms. Also a human community, for example, a family, changes its inner organization and adapts the relationships and activities of its members to a new situation, as soon as for instance, a child becomes seriously ill over a long period. This is also a learning process. If it does not succeed the family will sooner or later fall apart. Also, whole ecosystems undergo such long-term changing and adapting processes, for instance when certain plants and animals from foreign countries invade and start to spread.

Both, the inward effectiveness of learning experiences established in the brain, thus on the physical level, as well as the outward effectiveness of such experiences, thus on the social level, has had the consequence that, until today, learning and learning experiences have been primarily located and studied at the brain's level.

On the level of the development of shapeable brains, it was possible to anchor their own learning experiences in the structure of the brain. Learning processes were now no longer limited to the levels of genetic expression, the increased or decreased provision of certain enzyme proteins, structural proteins or receptor pro-

teins or their post-translational modification. It was now possible to structurally change neuronal networks and synaptic interconnection patterns. And in this way to sustainably anchor learning experiences in the brain.

The range of ways that those animals could learn was large. To survive, they had to learn how to connect a response to certain stimuli, which required them to be able to use that response to complete an action. The ones that could do this in several diverse ways were the ones that ended up with the bigger brains, and thereby succeeded and thrived.

The crucial factor for this was now no longer the amount of the networking options controlled by the genetic predispositions. The crucial factor was now – and here we have gotten to the human brain – how much from this amount of networking options could actually be stabilized as functional interconnection patterns.

So, the more diverse the range of perceptions, impressions, ideas and activities that a child has while growing up, the more multi-layered and strong his interaction with the world around him, including other people. Such a child will be better able of interacting with different people and will be better able to discover, explore and test his ways of handling things. The result will make him better able to deal with varying circumstances in his life and do so in a more calm and stable manner.

LEARNING IS A SELF-ORGANIZING PROCESS WITH THE AIM OF REGAINING COHERENCE

What most distinguishes living beings from all not-living forms is their ability to balance out disturbances of their internal system caused by changes in their outer world by activating certain reaction patterns established inside them. This is an achievement performed by the living being itself. By trying to stay alive, each living being produces certain effects in the form of characteristic changes in its outer world. This leads to new disturbances of its internal system of relationships and the living being concerned will again

activate certain inner reaction patterns to restore its understanding, etc. The associated reactivation of certain inner reaction patterns has the consequence that this can be – in the context of the respective possibilities – channeled, expanded and thus becomes increasingly easy to activate and use efficiently. The original internal system of relationships has changed in a certain way. The concerned living being has learned something new.

Although what triggered this learning process was a change occurring in its living environment, the relevant learning process could not have started without the disturbance that occurred in its internal system of relationships. Any disturbance of the reaction and relationship patterns established inside a living being and that are dependent on each other and interconnected, is accompanied by an increased energy consumption. Ultimately, the real trigger for the respective learning process is this energy deficit caused by the increased consumption. What each living being learns is a suitable reaction or answer to once again reduce this increased energy demand, so to turn a state of increased incoherence (with increased energy consumption) into a more coherent state (with lower energy consumption). This is why learning is a self-organizing process with the aim of regaining coherence.

But what can also be learned with the help of a nervous system and a brain happens only when there is a continuing disruption of the relationship patterns developed by the nerve cells so far. In this case also, the learning process is triggered by the higher energy demand caused by this disturbance of the existing relationship structure. Thus, there is a shortage in the energy supply of the affected nerve cell and resulting from it, the change of the intracellular ion balance. But nerve cells are better able than any other body cells to pass on such changes of their ion balance to other nerve cells. As a result, corresponding changes are triggered in them and in this way, a disturbance can be corrected through concerted action by interlinked nerve cells. At first, a characteristic excitation pattern is formed followed by its transmission and implementation of an

appropriate reaction pattern. The better this works out; the more efficient the initially occurring external or internal change will be counterbalanced. And the best results are always achieved when the activated excitation patterns can be structurally anchored as new linking patterns of the respective groups of nerve cells.

On the phenomenological level, such a learning process can be detected for example, when learning how to drive a car. In the beginning everything is new. The student driver has to concentrate on each and every move. S/he may even at first get a headache or become quite exhausted after each driving lesson. This illustrates the initial overexcitation in the brain and the increased energy consumption. The new excitation and reaction patterns subsequently stabilize better and better during each following driving lesson. With time, they consume almost no additional energy anymore. The brain has found its coherence again. The person has learned something new. What was irritating and tiring in the beginning, is now more fun and works by itself.

The same underlying principle can be observed in all learning processes taking place in social communities. As long as in a community – either an ant colony, a herd of elephants or a human family – the interaction between the members works optimally, everything is fine. Then, the respective community remains as it was. But as soon as a change occurs that seriously disrupts the previous coexistence, there will be growing irritations and misunderstandings amongst its members. The energy consumption is rapidly growing, the members are doing worse, and the respective community threatens to collapse.

LEARNING LEADS TO THE FORMATION OF LABILE PATTERNS OF RELATIONSHIPS TO FORM STABLE RELATIONSHIPS

In the brain, it is particularly easy to follow how learning processes are carried out at the level of nerve cells and synapses acti-

vated in the process and how they are structurally anchored in the long term in the form of

characteristic interconnection patterns that develop between nerve cells and their links. There must always be something new, either from the outside (as a new requirement, as a problem, as a danger, etc., incoherence), or from an internal need (incoherence arising in the organism), as a trigger of a learning process.

In both cases, attention is drawn to a particular perceived phenomenon, and a relationship to this phenomenon is established. The person is now more receptive to learning something new. This is because the person has to do so in the face of a new experience, and then later on, does it because they want to do it.

When a person establishes a relationship to a phenomenon for one reason or another, his or her sensory perception produces an excitement, is passed on to nerve-cell groups in the brain via appropriate nerve pathways, and a characteristic excitation pattern is triggered at the level of the activated neural networks. As a result, some of the synapses involved in this network will experience amplified signal transmission, in others to an inhibition.

If the attention for a certain period remains focused on the perception, the excitability of the activated linkages to the pattern of excitation and inhibition arising in this synaptic network adapts. Molecular changes in signal transmittance occur at the receptor level of the involved synapses, which also persists for a certain time after the activation of this network. Neuroscientists describe this change as long-term potentiation or long-term inhibition. As long as it continues, the affected pattern of excitement created by this new perception remains in an activated state, although it is no longer maintained by the sensory perception of the phenomenon. The person can, therefore, remember it for a while, so he has learned something - at least for a short time.

More interesting and lasting are all those learning processes in which there is not only the emergence of a synaptic excitement pattern. This is still present for a certain time and can be reactivat-

ed particularly easily during this time. This is always the case when such a new excitation pattern can also be structurally anchored in the form of a novel synaptic linkage pattern. Then, a small memory cliff or the perception of a particular partial aspect suffices to reactivate the entire complex network. Therefore, they recall the once-made and structurally anchored learning experience. However, to initiate such structural neuroplastic reconstruction processes something more than a mere or repeated self-referential relationship with a sensually perceptible phenomenon is needed. For this purpose, the person's perception must happen at the same time as the emotional excitement is activated in the deep part of their brain. That experience and what is learned from it, must be vital to that person in a personal way, so that it is embedded in their brains emotional areas and remains there in those nerve cells, which in turn branch out and t which then extend into all areas of the brain. These cells emit special messengers leading to an increased release of so-called neuroplastic growth factors used for all structural rebuilding processes. They activate an intracellular signal transduction cascade in the affected nerve cells, which reaches into their cell nuclei and leads to an increased depreciation of all those gene sequences. There is also an increased production of all those structural and enzyme proteins responsible for the structural rebuilding processes of neural networks, for the growth of new forts, and the new formation and stabilization of synaptic connections. Therefore, a learning content can only be anchored structurally and thus also sustainably in the brain, when vital and meaningful for that person.

And more important than an initial incoherence are the reaction patterns, the solutions found to compensate if this happens again. We are very happy about this, and it can sometimes even be inspiring, thus leading to the activation of these emotional centers, the release of these neuroplastic messengers and the structural anchoring of the corresponding learning experience. And if a once-established, and in this way anchored in the form of spe-

cific network structures anchored thought, feeling or action pattern is always activated with great enthusiasm, – figuratively – in the brain originate from initially developed paths, then gradually to roads and possibly even highways. The management strategy in question can be accessed more and more automatically and finally, almost automatically, however, at the expense of the many small secondary lines, which are now hardly ever beaten. Then, the person concerned has become caught up in a certain pattern of thought or behavior, from which he or she later finds it difficult to move, and can only do so through a new, different learning experience.

A LIVING BEING CAN ONLY LEARN SOMETHING THAT IS OF SIGNIFICANCE FOR ITS LIFE.

A living being that remains throughout its life the way it was from its

beginning can only survive in an environment, unaffected by change. However, such an environment does not exist, for a living being's life involves specific activities, which in return, have an impact on its living environment. This principle of interdependence goes for each and every living being on Earth, who, on the other side, represent each other's environment. It is this mere fact that makes it impossible for an environment to remain the same over a long period. That is why every living being has to change in the course of his life. And this can only be done by learning something.

The question that arises is not whether single or multiple organisms or systems of social individuals can learn, but how the learning takes place.

What is regarded as important for each of these cells, organisms and social systems varies just as much as their individual life-forms themselves. Thus, the way they learn must vary just as much as the things that are important to them.

But what is important to a particular living being? The only important things are those preventing the living being of remaining

the way it is at the moment. At the same time, one has to note that it is not the change in the outside world urging the individual to develop further, expand and complete its current skills and knowledge, but the change in the inside order of that person that cannot be balanced with the existing reaction and response patterns of that person. It is thus not the phenomenon perceived by a living thing, but the effect which is triggered by this perception in its interior, which sets in motion a corresponding learning process.

However, it differs from individual to individual whether and to which extent such a change in the outside world can cause a disorder in the coherence of the inner world of a living being. Even cells of the same type, i.e. single-celled organisms or the different cells of a multi-celled organism are more or less vulnerable to disorders of their inner world. In comparison, the same goes for single individuals of a particular species or social systems of different cultural backgrounds.

The extent to which an inner change is caused depends on the existent reaction and response patterns of the individual living being and on the efficiency of the use and activation of these patterns, which in return depends on the individual's previous experiences that were used in order to tackle similar problems and challenges and therefore saved as suitable reaction and response patterns.

It is this previous experience that determines whether a change in the inner or outer world of a person is perceived and valued as significant and therefore, whether this change necessitates a learning process.

The aspect being learned are not the actual problems or results a particular organism or social system is facing, but the solution method that helps the particular living being to regain its inner order, i.e. its coherence.

And since the crucial learner experiences that make a living creature are structurally anchored in its internal organization, all living beings develop their respective structurally anchored reaction and response patterns using the solutions they have found in

the course of their development so far. These solutions are important. Not objective and equally important for all, but only for the particular living being. Therefore, all learning processes are characterized by the subjective attribution of meaning. And therefore, nothing can be learned that is meaningless to a living thing.

LEARNING IS A PROCESS BASED ON THE PREVIOUSLY MADE LEARNING EXPERIENCES

It is now that the primary task of the nervous systems, afterwards the brain and the advantages of their development become evident: For it was with the aid of the nervous system and the brain that the living being was enabled to react to these endangering changes even before they reach its inner organization and expose it to deep disturbances. The extent of internal or external incoherence caused by a nervous system and a brain, could be reduced in an initial stage to such an extent that it did not exceed the responses of the body cells and the organs and organ systems formed by them. The more a living being learned with the aid of his nervous system and brain during his or her life, which outer and inner changes led to deep disturbances of his or her coherence, the bigger his or her chances of survival and reproduction under constantly changing living conditions.

As in the case of single cells or on the level of the internal organization of body cells, organs and organ systems in the multicellular systems, all learning processes, which are now possible with the formation of a nervous system and a brain, are linked to the previous acquisition of a corresponding spectrum of different reaction patterns bound. This is why, with the help of a brain, something really new can never be learned. It can only be extended or combined in a new way, which is already present or has been anchored in the inner organization of the brain due to previous learning experiences. In the brain, therefore, the nerve cells must already be linked in a certain way, any preceding learning experience must have been developed in the form of certain neural net-

work and synaptic interconnection patterns so something new can be added and anchored as an extended or different network. The new learning content, as the educators call it, must, therefore, be able to be linked to already existing knowledge.

And just as in the brain, something new can be developed within a social community, a family, a soccer club, a company or a religious community, and be anchored in the internal organization, which was not already at the beginning.

In all cases, learning is a process based on previous learning processes, a process that is expanding or new. Therefore, learning cannot end anywhere or begin at a certain stage of development. It begins not only with the formation of the first forms of life, it only makes its formation and its preservation at all, and it ends only when all that lives is dead.

NO LIVING BEING CAN LEARN SOMETHING WITHOUT THE IMPULSE/INCENTIVE OF OTHERS AND WITHOUT ITSELF INSPIRING OTHERS WITH WHAT IT LEARNED

From the very beginning, living creatures had to find solutions to survive and reproduce under conditions that were constantly changed by the effects of other living creatures. And any solution found particularly well to secure one's own life, and his own offspring from a particular form of life, inevitably led to a progressive change in the existing living conditions of not only the living species, but also of all living creatures living in the same habitat.

For this reason, no living being has become as it is today. All the reaction patterns, all the achievements, and all the structures that living beings have developed in the course of their development are solutions found in a persistent, co-evolutionary learning process of the different forms of life as responses to mutually induced changes in their respective living conditions.

Above all, the changes triggered by the activities of human beings have led to the destruction of many species that have origi-

nated over millions of years, and even different, very old human cultures. We humans have learned, among all possible, sometimes very extreme conditions by designing the conditions necessary for our survival and reproduction. As we adopted the most appropriate form of social life, the individualized community developed by our ancestors. In such individualized communities, learning experiences made by an individual can be transferred highly efficiently both horizontally (to the other members) as well as vertically (to the offspring). In this way, all human cultural achievements have been spread and transmitted through transgenerational learning processes.

None of everything a human being has learned in the course of his life so far, which he or she knows and can do, is made up of himself or herself. We have learned not only from reading, writing, and arithmetic, but also from speaking and even walking uprightly. All these learning experiences made concerning other people have been anchored in the form of paved relationships and interconnections patterns in the brain of every human being.

Therefore, the ability to relate to other persons is the prerequisite for taking over their knowledge and ability. The easier and lighter the knowledge and skills are, the ideas and experiences that a newcomer will take over from others and the more diverse and diverse the range of learning experiences that these other people have made can be used.

Thus, the ability to relate to other people represents the precondition for taking over their knowledge, skills, and abilities. The easier children and adolescents succeed in doing so and the bigger the spectre of the learning experiences made by these other people, the bigger the spectre of knowledge, skills and abilities and the imaginations and experiences that these children and adolescents can take over from others and make it their own.

We, humans, are already born with enormous empathy ability, and all young children look for a close, reliable relationship with their primary reference persons. As long as they do not

have any negative experiences, they extend this search to all persons within the narrower and wider range of the family they grow up in. The decisive factor is not the number of people with whom a child enters into a relationship, but the quality of these relationships. Only in relationships where there is an encounter between the subject and the subject, that is, only when a child feels in his uniqueness from another person that he or she is valued is, he or she ready to open himself and the knowledge and skill Ideas and experiences of this other person. Relationships in which a child – or later an adult – is treated as an object and made an object of assessments, expectations, intentions, interests, or even measures of other persons, block this take-over and force him into unfavorable learning experiences. Under these conditions, a child learns primarily to protect himself from such persons and their intentions, either by making them themselves the object of his or her activities or by looking at themselves as an object and behaving accordingly. Both ways prevent interaction and exchange, and the learning process loses its co-creative and co-developmental features. Thus, every constructive part of the interaction and sharing of learning experiences is suppressed. The child begins to be up against a brick wall and is restricted in its ability to interact with others and share knowledge, skills, and abilities unless it communicates with the person that treats it with open arms and unconditional subject-to-subject relations.

Both prevent the exchange; the learning process loses its co-creative and co-evolutional character. Any constructive interaction and sharing of learning experiences are thus suppressed. The child or adult concerned begins to “simmer in his own juice,” the possibilities of sharing and the interpersonal exchange of knowledge and ability, experiences and ideas can only be restricted and only in relation to those (few) people who encounter him or her in an open and unconditioned, even prejudice-free relationship between each subject.

ONLY THOSE PEOPLE CAN LEARN THAT CAN USE THE LEARNING ABILITY OF OTHERS FOR THE PURSUIT OF THEIR OWN GOALS AND INTENTIONS

Even in the last century, the idea of learning ability as a unique feature of human beings existed. This view, however, could not be sustained in view of the increasing number of observations of even very complex learning of animals.

This belief was replaced by another one, which is referred to as the so-called “Theory of Mind” by neuroscientists. It claims that only we humans can learn what is going on in the mind of another person, what this person’s plans and intentions are, and how these have an influence on what they say or do. But this too is obviously not an all-singular characteristic of us humans. Also, the primates related to us have this ability. They, too, can obviously learn to get an idea of what a different ape or their human guardian is doing and what he or she is pursuing. In the meantime, the first indications have been found that even dogs and some birds can develop an idea of what others are pursuing, what they think and intend.

Still, there is something that only we human beings can learn and what really differentiates us from animals is: only we can learn to use/take advantage of the learning ability of other creatures, above all those of our own peers and even those of our children in pursuit of their own intentions.

Only we can learn to train other animals in a way so that they behave in exactly the way we want them to and that they do exactly what we want. Nowadays, researchers of the mind and learning processes call it “Conditioning.” However, the fact that the desired learning process of animals and especially of other people can be achieved through rewards or punishments, had already been learned long before Pavlov with his experiments on dogs actually found out how this conditioning works.

However, in order for a so-called teacher to be able to teach a dog, a canary, a monkey, or another person by means of such con-

ditioning processes to do something that this living being wouldn't normally do or at least not on command or only under particular circumstances, this teacher must have an ability that only humans can obtain by learning. He or she must be able to regard this other living entity not as a subject, but as an object. Only then can he or she use it for his conditioning intentions.

The ability to treat other creatures or even fellow human beings as objects are not congenital. This ability is not inherent in man, but is obtained only through an own learning process in which the person concerned himself or herself has been made the object of these other people's intentions and goals, their evaluations and teachings, their education and training. This often starts in early childhood, continues in the educational institutions, and to this day, characterizes the nature of our contemporary cohabitation, living together and coexistence. Instead of encountering each other as individual subjects and learning from each other, we treat and use each other as objects in the pursuit of one another's intentions and goals.

This is a remarkable cultural achievement which can be obtained by the human being only due to his enormously complex brain and his integration into human communities. This ability could develop into a collective learning achievement – and be structurally anchored as such by educational institutions within human communities specifically designed and created for this purpose – because it was advantageous to view, treat and use others as objects under certain circumstances.

To speak in concrete terms, such conditions and circumstances are distress and misery, poverty and hardship caused by natural catastrophes, but mostly by military conflicts. More generally speaking these circumstances pose a threat to one's own existence, i.e. it is the need for security and control, caused by anxiety and fear, which has led to the development of this remarkable cultural achievement.

And the most effective strategy to cope and deal with this fear of a threatened and frightened human community lies in the es-

tablishment of a strictly organized hierarchical order and social structure. In this case, it is only a few persons that make decisions and decide on actions to be taken by as independent subjects. All others are made subordinate to these few people's decisions, measures, and orders.

It was only in this way that soldiers could be led, and wars won. However, until now this has not been the only way to avert collective threats, but also to secure the possessions and privileges acquired by the leaders. In the first place, it is because of this reason, (which is so important to human communities) that they have developed this ability to use other people as objects in pursuit of one's their own intentions and goals. Thus, social institutions and structures have been created to ensure there is always enough children and young people willing and ready to be used as objects in the pursuit of other person's intentions and goals. What we nowadays call "schools" has its origin in priest and cadet schools, where only until a few generations ago, the young generation was prepared and trained for its future tasks, duties, and responsibilities. Although the cane and birch as a means of punishment is abolished now, it is still common to think that students must be "motivated" to learn, which, apparently, works best by making them objects of expectations and evaluations, teachings and grades, teaching and other support measures. Thus, the space for joy and creativity involved in a discovery process is completely undermined.

CONCLUSION

Maintaining the inherent joy and pleasure of discovery and the desire for the creativity of each individual must be the most important goal in Education of the future society.

The ability to learn and discover is an expression of the vitality, present not just in humans, but in all living beings at all levels of the organization of life, starting off with prokaryotes to eukaryotic cells and multicellular organisms to social communities. Without

this ability to learn, life would neither have been able to develop into such a living variety like is right now, nor to develop at all. This ability to learn is a potential inherent in all living creatures, which is nourished by the formation of living beings increasingly capable of interaction and learning.

As we begin to understand that there can be no life without learning, it becomes evident how much the pleasure of life is indeed connected with the pleasure of learning – or more clearly, why the learning ability of all living beings could not but result in some kind of new invention that had to increase what was there as inherent from the onset (conditioning as a way to increase learning ability). This joy that comes with an important learning experience made comes always together with a joy that he or she is alive. Thus, the ability to learn is not only an expression of one's own vitality but, both learning and life are inextricably linked to each other through the same feeling. This also applies vice-versa: Those who lose their desire to learn, lose their desire and lust for life itself.

Therefore, the question, whether a person succeeds in developing her inherent pleasure in learning (and therefore in one's own liveliness), should not be underestimated. Rather, quite the opposite is true: This aspect plays an important role for the entire life of a person. Unfortunately, many people have already lost their inherent learning habits at a very early stage in life in their childhood.

This is due to unfavorable learning experiences, which have been triggered by other, mostly adult persons unconsciously and mostly without bad intentions. Nobody loses his or her inherent ease of learning and life just like that. For this to happen, there must have been other people involved, who have not understood what they are doing and who themselves, mostly as a child, also made the same experience of being regarded and treated not as subjects, but objects.

It is only when more and more people start to understand this subtle process of transgenerational sharing/passing on/transmis-

sion of negative learning experiences which will make it possible to break it. It may be that brain research may not contribute much to improving the practical design of learning processes. But their knowledge that our human brain can be modified in terms of time and function through new experiences leaves us at least one concrete conclusion: We can change. We could stop making each other objects of our intentions and goals and our expectations.

PARADIGM SHIFT

Helena Singer



SUMMARY

In Brazil, experiences of educational territories have developed over the past few decades, albeit in fragmented fashion. In an ed-

ucational territory, conditions for the emancipation of individuals are guaranteed, with the strengthening of their associative capacity and active participation in society. To achieve this, a territory must have a structure that guarantees a few basic conditions: democratic management, schools aligned with democratic principles, an integrated social network protection and a variety of diverse educational opportunities. Several organizations, communities, and cities, together with the federal government have created programs that promote and strengthen these conditions. Of particular importance is the entire education agenda, which proposes the nexus between various times, agents, resources and policies of a territory for the full development of individuals. This article presents a proposal for the definition of educational territories and brings some field experience from Brazil.

Keywords: democracy, education, educational territories, integral education, democratic schools.

PARADIGM SHIFT

In Brazil, emancipatory initiatives in the field of education have

been growing in recent years. Some social processes have made it possible to understand this favorable context.

Firstly, the development of new information and communication technologies has facilitated the processes of autonomous learning, rendering obsolete previous classroom-based teaching structures: chalkboard-facing desks, expository classes, fragmented knowledge across disciplines and adults that speak to others without a voice. These same technologies also enable new forms of producing knowledge, which are based on networks, no longer dependent on specialists, with centralized production and dissemination. In the context of a “knowledge society”, it becomes evident that education implies the involvement of people in multiple communication flows, flows that will be all the more educational, the richer the interactions are.

Secondly, advances in scientific research provoke changes in the field of education, advances that the Portuguese sociologist Boaventura Sousa Santos associates with the emergence of a new paradigm based on neither non-disciplinary nor evolutionary structures, but rather promoting dialogue between different knowledge areas and also between science and traditional knowledge. The author speaks of a paradigm of common sense, of living a prudent life, one that goes beyond technical-scientific rationality by valuing the aesthetic-expressive rationality, recognizing the intertextualities for the production of local emancipatory projects. These projects are based on participatory democracy, alternative production systems, multiculturalism, alternative forms of knowledge circulation and the internationalization of social struggles. Global social experience in this sense is varied and constantly wasted (Santos, 2000).

About cognitive processes, research based on new technologies and the norms of this new paradigm has confirmed what educators since the 19th century have started: to learn; people need emotional involvement in mind and body with the information. Educational structures must, therefore, seek this emotional involvement and

mobilization, overcoming the notion that it is necessary to tame the body so that the mind can learn.

The third trend conducive to change relates to changes in the working world regarding a deregulation of relationships, the unpredictability of careers and the endless potential career paths. A long and satisfying career now depends more on the ability always to learn, create new projects and utilize networks, than to master highly specialized technical knowledge.

It is in this context that the failure of schools has been headline material in the newspaper and proven daily in classrooms by the dismay of students and teachers, as well as in the hallways and courtyards dominated by violence. This failure is not only of the school as an institution, but also of the public education policies passed in Brazil and other countries starting in the 1990s based on results of national mathematics and languages tests and international rankings; this is contrary to the purpose of shaping individuals’ apt to promote democracy.

In response to this obvious failure, a new movement for transformation in education is gaining momentum, one that is part of the mobilization of new actors aiming to reinvent democracy in its various dimensions. These are civil society initiatives that seek new ways of doing, creative and collective methods of developing autonomy and cooperation that contribute to the social wellbeing of both current and future generations.

In these initiatives, educators, communicators, artists, researchers, students and activists from various fields design new educational experiences that utilize and simultaneously update proposals of thinkers such as Leon Tolstoi, John Dewey, Janusz Korczak, Celestin Freinet, Ivan Illich and Paulo Freire, amongst others, who have dedicated themselves to the formulation of emancipatory educational proposals.

SOCIAL MOVEMENTS FOR EMANCIPATORY

EDUCATION

The International Education Network (IDEC) is a global movement that began in the late 1990s. It is particularly strongest in Europe, the United States and Israel, although it is present in several countries across five continents. The movement articulates, above all, school initiatives that promote democratic management and knowledge: students, educators, and employees participation in the management process, and the curriculum is built according to the interests of the students⁴⁸.

In Brazil, schools began to structure themselves by the Law of Guidelines and National Bases of Education after its promulgation in December 1996. In several cities in the state of São Paulo, there are private, non-profit, democratic schools that offer early childhood education, as well as municipal democratic schools that offer elementary and secondary education, in addition to youth and adult education. If the municipal schools of São Paulo have built democratic political-pedagogical projects exercising their autonomy, the municipal government of Rio de Janeiro has projects that have enabled the creation of schools that are closer to their communities, but don't include disciplinary structure. In Bahia, we also find private nonprofit schools. In the Amazon, indigenous schools from Alto do Rio Negro began to structure themselves so as to ensure that their languages and cultures were recognized and valued in their dialogue with academia⁴⁹. In Santa Catarina and Rio Grande do Sul, schools linked to the Landless Movement created working groups to transform their political, pedagogical project towards democratization.

Recently, another agenda has gained momentum in the field of education in Brazil: the movement for integral education, which proposes the articulation of the various agents of a territory to guarantee the holistic development of individuals – intellectually, emotionally, physically and socially⁵⁰. It is understood that for such a complex task, the integration of several actors around a common project

is necessary, a project that can transform communities into neighbourhoods that educate themselves. Schools have fundamental roles in this process since their mission is to educate new generations. For schools to integrate with families and other educational community agents, a democratic and innovative pedagogical, political project is required. It is at this point that the movement for democratic education meets the movement for integral education.

From the beginning, the integral education agenda was the responsibility of government and not social movements. Municipal governments, such as those in Belo Horizonte in Minas Gerais and Nova Iguaçu in Rio de Janeiro, created programs that promoted the participation of various sectors in educational projects and strategies, seeking close ties with the community to offer a greater diversity of educational opportunities in the territories. These municipal experiences inspired the federal government in 2007 to create a work group composed of public managers, civil society organizations, and public universities to elaborate a program that could lead to comprehensive education policies in the country. Thus, the More Education program was born, which now offers resources directly to more than 40,000 schools throughout the country, aiming for the implementation of political pedagogical projects that include the community as agents active in education and the expansion of times and places to learn.

However, despite reaching thousands of schools, it not in all parts of the country that Mais Educação⁵¹ induces emancipatory holistic education projects. For that to happen, it is necessary, first, that local governments responsible for basic education have holistic education policies. More importantly, schools need to integrate community-based education practices and integrate themselves to emancipatory movements that have existed in Brazil for decades.

Certainly, one of the most significant movements in Brazilian education in recent history was the one that was born in Recife, Pernambuco State, under the name of the Popular Culture Movement (MCP) in the 1960s. Its objectives were to literate children and adults

and to spread the regional popular art. On one of its fronts, the city hall provided materials for parents to build school benches and thus created literacy rooms for children in churches, recreational clubs, and associations. In another front were organized spectacles in public squares, artistic groups, workshops, art courses and exhibitions. The books and booklets discussed and integrated literacy work with the appreciation of popular culture. It was there that educator Paulo Freire began to consolidate his theories and practices aimed at popular emancipation. The movement spread through other cities and was later repressed by the military dictatorship⁵².

Integral education resumes this movement whenever it promotes the creative occupation of public spaces, the strengthening of local cultural initiatives and productions, the democratization of educational opportunities and, above all, when it promotes the recognition and integration of the school curriculum with community knowledge and popular expressions – not only the traditional ones, but also the brand new cultural expressions of Brazilian youth.

In the period of redemocratization, another important educational movement began to be outlined, with the creation of civil society organizations focused on educational processes that promote creativity, solidarity, and autonomy in the various areas that guarantee people's wellbeing. These began to spread, and so did many art-education initiatives, educommunication⁵³, audiovisual education⁵⁴, digital education, environmental education⁵⁵, human rights education⁵⁶, and education for peace. When integral education projects recognize, legitimize and integrate these initiatives with schools, they strengthen social movements for the rights to culture, communication, digital inclusion, the sustainable environment, peace, and broadening the spectrum of the right to education. The partnership of schools with these organizations not only diversifies the spaces and time of learning, but also brings to the curriculum local social issues and democratic culture.

Gradually, networks involving these initiatives began to emerge

and created the conditions for a powerful social movement in education. The *Mais Educação* network was structured in regional poles and national meetings, in which the principles and the agenda of integral education in the country were debated. During the 2013 meeting in Brasilia, an Open Letter - Manifesto was launched in which integral education is affirmed as a fundamental element of the system of guaranteeing rights.

In the same year, it created the Reference Center for Integral Education⁵⁷, an initiative of governmental and non - governmental organizations to promote research, development, improvement and open source references that contribute to public policies in this area.

Also in 2013, the Manifesto “Changing the School, Improving Education: Transforming a Country” was launched⁵⁸. This manifesto was written by educators, activists, and researchers. Since 2008, over 2,000 members are connected in a network with a virtual page to a few hundred democratic initiatives around the country. Regional meetings of this network began to discuss common principles to a proposal of social transformation from education. The Manifesto poses the need to guarantee the democratic management of schools, the strengthening of “learning communities conceived by a collective project based on a local development project” and integral education as a proposal that overcomes the fragmentation of knowledge in series and disciplines.

The Manifesto was launched during the National Conference of Alternatives for a New Education, in Brasilia, and then delivered to the Ministry of Education and discussed in more than thirty cities, including Legislative Council Chambers, communities and education departments. In a virtual social network, the page of the National Network of Democratic Education was created⁵⁹. Face to face meetings started to happen every month in different parts of the country. Foreign activists have promoted the integration of this network into the international network of democratic education. A global collaborative platform is in permanent development where people included the experiences with which they are involved in different countries⁶⁰.

Movies and books, funded collectively, began to record the diversity of experiences, collective maps show the distribution of these around the world, and festivals herald the new possibilities.

EDUCATIONAL TERRITORIES

By opening up and engaging with local social issues, the school begins to catalyze processes that can produce educational territories. It seeks to create conditions so that the various actors in the places where children and young people live recognize their responsibility in the education of the new generations and organize themselves around a common project. The conceptualization, as well as the experience of the educational territories, is still vague and incipient. In this article, we will adopt the perspective of educational territories that has been built by Cidade Escola Aprendiz⁶¹ since 1997, a social organization of public interest, headquartered in São Paulo and operations in various cities of the country, which now takes over the management of the Center for References in Integral Education.

This view of territory presumes that when we refer to the space used by people, we are dealing at the same time with content, local environment, and process of social relations. This notion of “used territory” refers to a construction made by people, starting with the daily route work-home, home-school, and the daily relationships that are established in the use of spaces throughout life. The feeling of belonging is a central element here, arising from the experience of the people and from what they exert and project onto the spaces. The territory thus involves concrete dimensions, as well as dimensions of representation of the space in which one lives. In the same way as the relations of identity, the relations of neighborhood strongly influence the distribution of people over the territory. These relationships will also guide the interaction of the population with services at the local level that occurs in the territories. The vision of this complexity around the idea of territory seeks to overcome the frequent segmentation of demands and the focus of actions that

fragments public policies. Such complexity is necessary for the design of the educational territory. For Cidade Escola Aprendiz, territory becomes educational when four conditions are reached:

Firstly, there is a Local Education Plan (PEL), elaborated and monitored in a democratic way, guaranteeing an intersectoral, interdisciplinary and intergenerational perspective, which exactly overcomes the fragmentation of public policies⁶².

This PEL envisages schools as catalysts for educational territory. In this way, the second element of the educational territory is thus achieved when schools begin to recognize community knowledge, engage with local problems and promote the appropriation of the territory.

The third condition is that the socio pedagogical network – that is formed by all public equipment and civil society organizations aimed at children, adolescents, and young people – It works in an integrated way, sharing data and agendas, aligning principles and building common strategies to work. Finally, the PEL must guide action plans that allow the expansion and diversification of opportunities through the recognition and involvement of its various agents. Some examples: a restaurant turns into a space where computer courses are provided and in which teens teach seniors. Museums create programs aimed at the public that is usually left behind in these spaces, such as small children, immigrants or people with disabilities. Cultural spaces managed by the community are created in public schools; Squares are revitalized by the creative interventions of artists and the community and are then used for skateboarding, juggling, gardening, basketball and shows.

EDUCATIONAL NEIGHBORHOOD OF HELIÓPOLIS: AN EXPERIENCE OF EDUCATIONAL TERRITORY

The characterization of educational territory that we are adopting in this article helps us learn of an experience that has been developed since the turn of the millennium in a suburb of the city of São Paulo, the district of Heliópolis, in the southeast of the city.

Although this experience has been carried out in dialogue with

Cidade Escola Aprendiz, its authors are exclusively the agents of the territory. It was on his initiative that today Heliópolis presents itself as an Educational Neighborhood, that is, a territory that has education as the driving force and organizer of the community in the struggle for their rights. A territory where, as described by Arlete Persoli, manager of Heliópolis Educational and Cultural Co-existence Center, “the search for a libertarian education goes beyond the walls of the school and spreads through the streets and alleys, breaking prejudices, strengthening the identity of the community and promoting Their integration with the city.” (Santis and Persoli, 2013: 17-9).

The first element of the educational territory, the local educational plan, is possible due to the presence of the União de Núcleos e Associações dos Moradores de Heliópolis, or UNAS, which is the local community association of Heliópolis founded in the early 1980s, as a result of the democratic organization for the struggle for fundamental rights. The search for a dignified life demanded UNAS to overcome a disciplinary vision, starting to work in areas as diverse as housing, education, culture, health, environment, sports, leisure, and income generation. As Geronino Barbosa, manager of the Center for Children and Adolescents (CCA), explains: “When you believe in the transformation of a neighborhood, community, society, a country, you do not act only on one thing, but on everything. So today I work in the area of housing, in the area of education, and of communication...” (Santis e Persoli, 2013: 42-3)

UNAS and its leaders also needed to seek intersectionality, implementing partnerships with the public sector, private companies, and civil society organizations. Cleide Alves, president of the Association, recalls: “I celebrate the day of Heliópolis from the first fight of the locals. The day of the fight. That’s why we have Rua da Mina, where UNAS headquarters is, because that’s where we used to sit with everybody, all the leaderships, all the committees of residents, and we discussed what was happening in each place. We got all the mayors to come here, did some kind of intervention... It’s this will that we always had, the public power to be present,

playing its part.” (Santis and Persoli, 2013: 40-1)

During over forty years of struggle, adults, young people, the elderly, children, and adolescents were united. The manager of the Center for Children and Adolescents of Rua da Mina Genésia Miranda knows that it is “this new generation that today is within the UNAS, these projects... they are going to continue, and we have many challenges ahead.” (Santis e Persoli, 2013: 31-4) Young people raised in Heliópolis and trained at UNAS do not fear the challenges. Wellington de Souza, for example, took advantage of the various opportunities offered by courses offered by the Union, the latter being a grant from the Cuban government to study humanitarian medicine in that country and “to achieve a dream that it never had.” (Santis and Persoli, 2013: 63-4).

Currently, the organization is based on the premises and strategies of an educational territory, which reaches the 125 thousand people there. According to the community leader José Geraldo (Santis and Persoli, 2013: 47-51) in the projection that the community makes for the future, the residents will conquer the regularization of their homes; the streets will be a priority for people, not cars, Schools will be managed by the community. The process has already begun. In 2011, the first 162 apartments designed by the architect Ruy Ohtake were inaugurated for the Residencial Heliópolis. Implemented in a land that was part of the facilities of SABESP, the water and sewage company in the state of São Paulo, the condominium draws attention to the cylindrical shape of buildings, nicknamed by the media and residents of “redondinhos.” Round and colorful, the buildings distribute themselves generously over the terrain, leaving the center space for a playground, sports court, and a community use environment.

The second aspect that creates the conditions for Heliópolis to be an educational territory is that there is a school that catalyzes the local educational plan. The origin of the movement for Bairro Educador, the Sun Peace Movement, is in the relationship of the Municipal School of Elementary Education (EMEF) Campos Salles with

the community. Since taking office in 1995, the school has teamed up with local leaders to become a center of the struggle for the development of people's rights. With this clear mission in mind and the ever stronger bond with the community, Braz gradually formed a team of teachers who, together with the students, parents, and leaders, formulated a pedagogical, political project of a democratic school. In an environment that values the democratic coexistence, the structure is of large halls, with tables where groups of students work together, based on routes of research chosen by them. When they need help, they can turn to the three teachers who are available at the moment. Teachers work in partnership, breaking away from the isolation structure of the classroom. The management of school coexistence is carried out by the Student Republic, in which there is a mayor and councilors elected by the group of students, secretaries appointed by the mayor and mediating commissions.

Campos Salles thus took its place of leadership in the community, and the other schools go the same way. Or walk. In the Walk of Peace, which has invaded the streets of the neighborhood for 16 years, each educational equipment participates with flags and posters, resulting from research involving students and educators throughout the year. As Genésia says, Bairro Educator comes to guarantee the "quality of learning," overcoming this "traditional method that does not advance, do anyway," which over the years "favored exclusion. Her husband, João Miranda, President of UNAS, completes: "It cannot be inside four walls, but it cannot be just on the street... I say this a lot to young people... You are from RAP; you have a movement already. Didi, the master of capoeira, does not know how to read, does not know how to write, but when he has been baptized as a capoeira, he fills people's squares... So it is in this education that I believe." (Santis e Persoli, 2013: 34-7).

Schools in Bairro Educador also apply in an education model that values local knowledge. José Geraldo does not forget the emotion that the Campos Salles teachers felt when they first went to their students' homes and were able to understand the misery of

the situation in which they lived.

In these visits, educators come in contact with the wisdom of people. A wisdom derived from survival in the most precarious conditions. Complex knowledge of who knows how to build their house, dig a hole to get water, open and manage businesses with very scarce resources, raising their children lovingly even if they are away from them for long periods of the day. The wisdom of resistance to injustice, resistance by a political organization, with the creation of commissions, alliances, petitions, and their communication channels. But also the resistance by the confrontation, with pressure on judges, mayors, and other powerful people, with the occupations, the physical interception of tractors and guns, whenever it is necessary. The accumulated knowledge about the rights of all, about politics, and power strategies.

The wisdom of those who ask for support, but also helps those who need it, knowledge about the strength of unity manifested in so many efforts and solidarity campaigns, a knowledge that João Miranda considers his greatest achievement: "From the point of view of learning, to believe in the power of a community, and to understand that I am not alone. The wisdom of those who learn from life, such as Mércia dos Santos, manager of the Sun Rays shelter: "To me, where I go, I see as a learning opportunity. First I ask myself what I can give, and second, I see what I can learn." (Santis e Persoli, 2013: 45-7).

The wisdom of those who know their own history and the history of their place, like the saleswoman Norma Soares: "The difficulty has been, there will always be, but also the victory, and that depends on each one of us. Because if you think of living alone in a neighborhood already, you do not know how it was born. Here we know how he was born." (Santis and Persoli, 2013: 78-80)

The third element of an educational territory that we find in Heliópolis is the integration of the network that serves the children, adolescents and young people there. This integration, although partial, is a possibility given its structure linked to UNAS. There are eleven Centers for Early Childhood Education (CIS), eight CCAs, two cen-

ters of the Socio-educational Measures Service in Open Space, and the Family Social Assistance Service (SASF), managed by the association based on agreements with the government.

The integration of the social protection network in the neighborhood, however, is not limited to public welfare, education and health facilities. One day a lost child arrived at Heliópolis Radio conducted by police officers. Radialist Danilo de Oliveira thought that the police was there to close the radio, which was not yet legalized, but the police clarified: “We need your help: the radio station is a good location inside Heliópolis, and you could help us.” The announcement was made, and the mother can find her son again.

Finally, there is the element that is perhaps the most visible in the conquest of the educational territory of Heliópolis: the democratization of educational opportunities for all. In the Center of Coexistence, the community has conquered a primary school, a nursery school, three preschools – called CEIs, a technical school, and a cultural center. In the technical school, courses chosen by the community are offered – nutrition, construction, and web design. In the cultural center, there is an art gallery and a cinema, which can also be used as theater, and spaces for various courses. A multisport center is in the final stages of construction.

A few meters away is the Baccarelli Institute, which offers courses focusing on musical and artistic education, personal development and professional opportunity, and is home to the Orchestra Symphony Heliópolis, a reference in the city. UNAS manages a community library, three distance learning centers, seven centers of the Youth and Adult Literacy Movement (MOVA), a Culture Point, a carpentry school, and Community Radio.

In all these opportunities created by the educational territory, what matters is quality. This is how João Miranda defines it: not only spaces for mothers to leave their children while working, “which only benefits their boss,” there are places that accompany the development of children.

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LEARNING IN COMMUNITY

José Pacheco

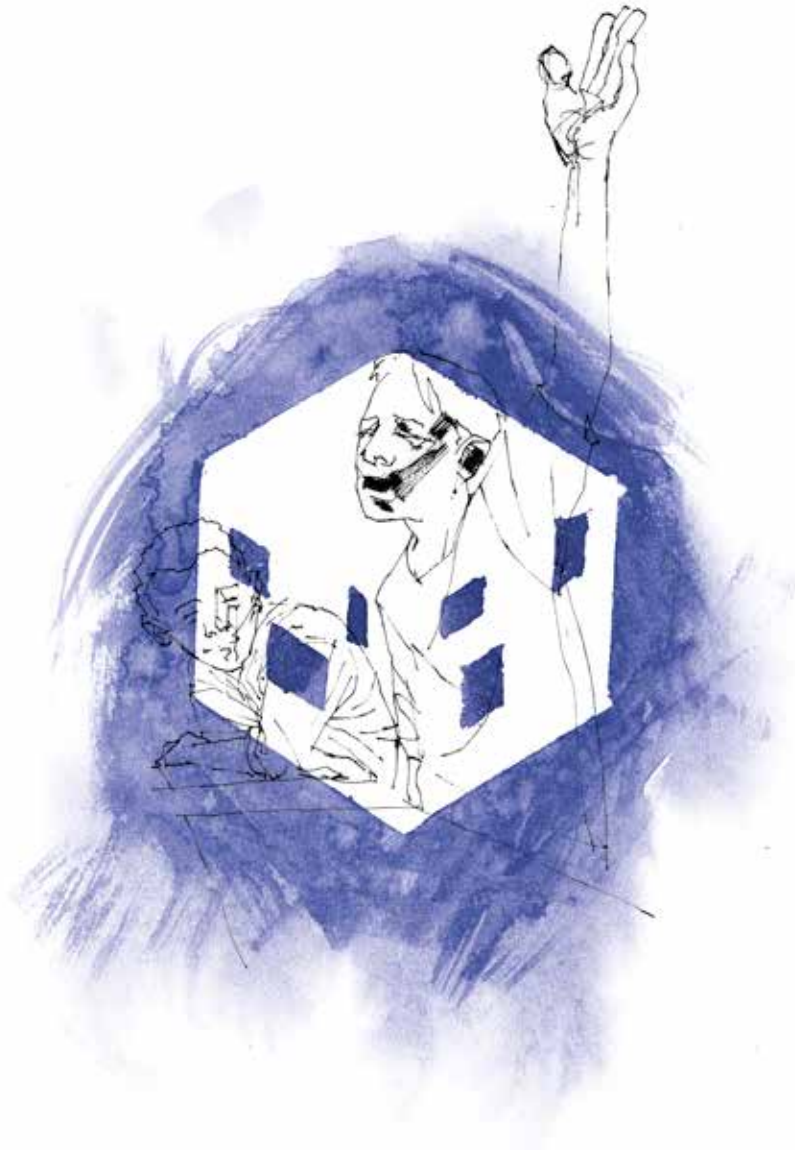
Contemporary human projects are not in line with the school

practices that we still have. There is a lack of a new ethical system and a clear axiological matrix based on knowing how to care for and live with. They demand that we abandon stereotypes and prejudices, they demand that an obsolete school be transformed into a school that gives to all and everyone an opportunity to be and learn.

Maturana tells us that education takes place in the coexistence, in a reciprocal way among those who live together. If modernity tends to refer us to an individualistic ethic, it will never be too much to talk about coexistence, dialogue, and participation as learning conditions.

The School is a historical product of an era and social modernity needs. Between the eighteenth century and the nineteenth century it fulfilled expectations and purposes deposited in it. Later, it was lost in Cartesian or economic shortcuts. Today, the Society and the School are archipelagos of solitude. The school, as a core of learning, segregated from the social whole and separated from life – life, which should be a constituent of its practice and its proposals, – today represents an outdated idea and is insufficient for the necessary demands.

It is urgent to transform education, to go beyond the restricted scope of school education, to act in multiple social, political and cultural spaces. In 1979, Lauro de Oliveira Lima wrote: “The expression “school of the community” seeks to signify the isolationist disencysted of the tradi-



tional school. In the future, the school will be a community center that promotes the synchronic and diachronic balances of the social group it serves. Not only will the school use collective equipment as a “school” instrument, but the community will use the school site as the center of activity. [...] the school will not be reduced to a walled fixed place.”

Among the school, the neighborhood, the housing, the sports club, the cultural and recreational association, the place of work or leisure, it is necessary to establish a chain of human interaction capable of giving meaning to the daily life of the people and, with that, influence positively in their life trajectories. We will then contribute to the creation of spaces that, because of their anthropological density, can serve to help awaken the human vocation to transcendence and, to that extent, function as social ties, true laboratories where the ethical attachment to the other has a mutual concern, respect and sensitivity. Empowered in practices of authentic social relation, intersubjective recognition emerges as a condition of coexistence, peace and solidarity. These values, as we know, are compiled by the contemporary world with urgency.

At Escola da Ponte in Portugal more than three decades ago, we understood that we should not continue to reproduce the way they taught us in courses and lectures. At a time when there were no computers, we watched the projection of transparencies with proposals for theories and practices.

None of them fitted into the ‘here and now’ of our classrooms, perhaps because none of the lecturers had put into practice their theories and practices that they recommended. And what did those wise creatures say? In their lectures, they exhorted us to use a technique or talk about what they had read in books; books that we could read, without needing to waste time listening to lectures.

In Portugal, after the increment in continuing teacher training due to the institutionalization of a sub-system training and the investment of millions of euros, the results were disappointing. After twenty years and thousands of courses and lectures, little or nothing has changed in teacher’s attitude, little or nothing has changed

in their practices: the teacher goes, he listens and, in the end, he learns nothing that he can use. Conclusion: if teachers’ competence were measured by the number of lectures they attended, their qualification would be extraordinary.

At Ponte, we believe that transformations happen when one deciphers through a dialogue between the self that acts and the self that questions itself. And that, whenever a teacher assumes individual responsibility for the acts of his collective, reworking his personal and professional culture,

he or she transforms spaces of solitude into spaces of coexistence and dialogue. In this conviction, we react to the hegemony of the transmissive model, because it is from questions that are elaborated we project the production of life and meaning for life. We insist on an interpersonal relationship and on the relationship with a biological and psychological territory of sharing in learning networks.

Winnicott defines the human being as a person in relation, being singular, that cannot exist without the presence of the other. The individual-with-others is aware of his or her role in a complex and concrete symbolic order that protects him or her from the deadly effects of standardization. If it is true that the concept of sharing is fraught with moralistic connotations. It is also true that sharing is a manifestation of sharing a sense that rejects the attitudes of those who think they have the right to answer questions they have not heard.

Contrary to mechanistic rationalities, we understand that in a relation of listening, the circulation of effects produces new modes of social structuring. Not denying the potential of reason and reflection, we join emotions, feelings, intuitions and life experiences. Listening, beyond its methodological meaning, must be humanly meaningful and based on a “win-win” deontology of exchange. It will have to give up masterful attitudes so that all the actors learn being mediated by the world.

To the adherents of the single thought (which I still encounter here and there) I will say that it is necessary to know how to silence “listening,” the foundation of the recognition of the other. I will say that we need to revise our need to desire the other according to our image,

respecting it in a non-narcissistic perspective, that is, the one that respects the other, the non-me, the unlike-me, the one who does not want to catechize anyone; which defends freedom of ideas and beliefs, as Freud would warn us. Where there are groups of students lined up in cell-rooms, we will hardly find traces of coexistence. Where there are series and classes based on the belief that it is possible to teach everyone as if it were only one, participation will be absent. I will say that as long as the teacher is alone in the classroom, it will be impossible to think of dialogue, coexistence and participation.

It is a scandal that in the 21st century we see formators and lecturers establish the sequence and rhythm of the lecture or lectures, in a paternalistic attitude and the consequences of which they are not aware, and I believe, totally ignore. They resort to the presentation of slides and videos when they could be mediators between knowledge and the domain of the concerns of those who interact with them. It is unfortunate to insist on the belief in the linear transferability of knowledge. Perhaps they do so because they have forgotten that the way the teacher learns is the way the teacher teaches, that a course or talk about autonomy, coexistence and participation is almost always the negation of what they intend to convey because it is based on a vertical relation, which generates dependence on the object listener.

The transmissive model of lecture and class, which ignores the possibility of knowledge production through questioning and dialogue, produces sociocultural determinants that prevent the full realization of the human being. Over the last thirty years, we have departed from this model, but we find that it remains dominant and almost hegemonic.

Clarisse Lispector tells us that, in matters of living, it can never be reached. And that trajectory is ourselves. Therefore, I insist on the need for the metamorphosis of the teacher, who must learn from themselves (need to know themselves), get out of the classroom ghetto (need to recognize the other) and leave the school building (need to understand the world). The organizational ethos of a school depends on its social insertion, on proximity relations with other social actors.

It also depends on the recognition of the unpredictability of the entire educational act. As an act of relationship, it is unique, unrepeatable, impossible to predict through planning and one-to-one sessions, questioning abstractions as “class” or “homogeneous group” in the cognitive, affective, emotional, physical and moral dimensions.

Someone said that the educator is more what he does than what he knows. But it is more what it is than what it does. I would add that we do not convey what we say, but what we are. And I believe it is possible to achieve effective changes in human behavior and culture, questioning the structure of the forms of education we practice. The development of attitudes of respect, solidarity and preservation of life presupposes escaping from formatting and overcoming fragmented visions. It presupposes learning to see the relations between things and the collective impacts generated by individual actions, and vice versa, to see the patterns of domination and exploitation present in our culture.

This assertion is present in the elaboration of public policies and positively influences the technocrats that control the educational system, as well as the institutions of teacher training. Because the current law creates obstacles to the relationship and the establishment of links. An example: if it is known that we learn from someone who knows something different from what we know and that little (or nothing at all) is learned from the same age, why are the series and classes predominantly made up of young people of the same age group?

It is urgent to reformulate terminologies: to develop work WITH and not to work FOR; to replace OR with AND; to exchange I for US. It is urgent to redefine the profile of the learning mediator, to consider the student as an active participant in social transformations, to reconfigure school practices and to deconstruct the idea of unselecting schools. It will be enough if teachers question themselves. It is this ability to challenge practices that emerge devices of change, not only in schools but in all social spaces where learning occurs.

The obstacles that a school encounters, when it aspires to new practices, are problems of relation. Schools lack spaces of reflective coexistence. We need to understand that people are those with

whom we share the day, what their needs are (educational and other), take care of the teacher, so they can see themselves the dignity of a human being and see other educators as people. We need to exercise the unconditional positive consideration that Carl Rogers spoke of, to practice the confirmation, in Martin Buber's words, or the unconditional love, postulated by Alice Miller.

In Escola da Ponte, having run the project over forty years, we understand that the learning processes should not be centered on the teacher or student, that everything goes through the relationship. We institute multiple mediators. Everything concerning the child and the school must be studied from a relational perspective. In this sense, the educator must know how to manage the unpredictability of the relationship, because it is impossible to predict the multiplicity and the variety of situations with which it may come. The educator will recognize that autonomy does not rhyme with hierarchy, nor with bureaucracy. That, just as one learns to read by reading, and if one learns to do by doing, one also learns to be by being, and one learns to coexist by coexisting. That is the authorship that confers dignity to the educational act. In 21st century Brazil, the Projeto Âncora School proves the possibility of everyone learning and being happy. In Catalonia, Jesuit colleges eradicate classes and other anachronisms. Why is "normose" maintained?

Forcing each one to be the other-equal-to-all is to deny him or her the possibility of existing as a free and conscious person. Unfortunately, we see that education is justified more as a means of social control than as an instrument of personal improvement.

As a result, the most recent educational theory and practice have transferred the philosophical basis of education from the political to the technical, where primacy is given over to effectiveness and control.

The organization of school work remains focused on tasks that have an equal base of information for all, the same kind of means and techniques for all, individual proofs of adaptation to the standard required for the "average student" (a standard of ability to which it compares each student individually). As a general rule, the child is included in a rigid group of child-students whom the teacher teaches

as a whole at the same time, making themselves heard in the same code, demanding the same goals for all. This procedure is so common that its effects on the treatment of a singular being as an object of standardized teaching are hardly assessed. Teaching is not to instill or transmit, it is to mediate and learn. The teacher is not the one who imposes the answers, but the one who renews questions.

It is in this role that he/she is irreplaceable. As the poet Manoel de Barros would say, learning is unlearning, overcoming what encloses and alienates us. Everything that is merely transmitted has little influence on the person's behavior.

The knowledge that can influence the individual's knowledge is what he or she discovers and appropriates. The intentional act characterizes a dignified existence, whenever a student participates in a collective project. Citizenship is a "technique of life." That is why at Ponte we refuse to educate for citizenship – we educate in citizenship. And each learner of the Ponte – child, youth or adult – is individually responsible for the acts of his collective.

I know that it is possible to pass from the absurd to the utopia. The schools where I spent my life as a teacher show possible ways of achieving utopias. I know that what is new should not apply deductive reasoning and that there should be coherence between what is believed and what is done.

That is what I apply to the way I act during my public interventions: I listen to questions and desires; I learn by talking. It is the way I act in the context of lectures, such as on the school floor, gently disturbing educators and inspiring new practices.

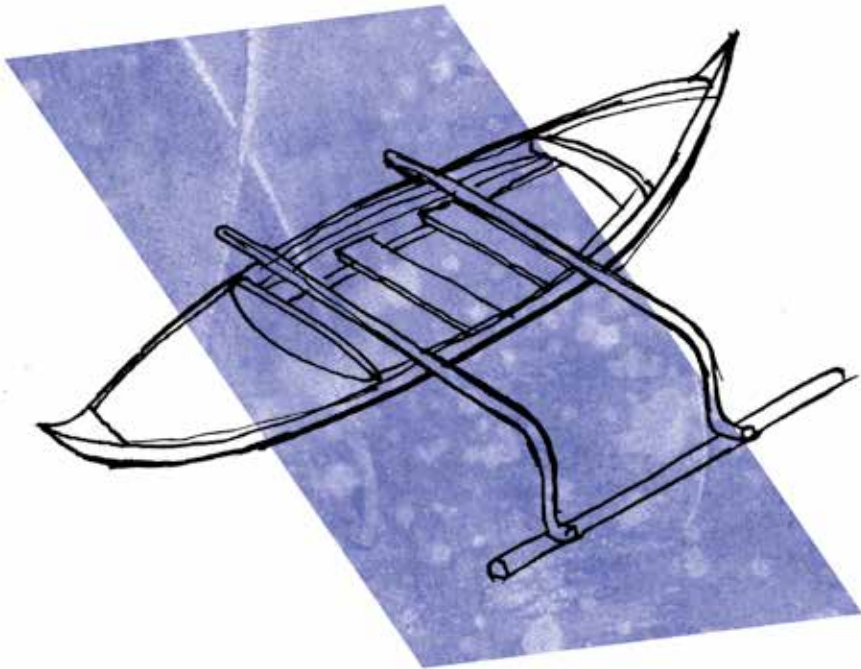
There remains a snag. I have always assumed that the way I proceed is as valid as the way others act, and that I respect and try to understand different practices from the one I adopt. However, what is different disturbs us, and I regret that there are still those who refuse to even try to understand that there are many ways of doing education. There remains the belief in the ability to act of those who dare to ask.

ISLAND IN-SIGHT!

Kū Kahakalau

INTRODUCTION

Eia 'o Hawai'i, a he moku, a he kanaka. Here is Hawai'i, an island, a man. (Ancient Hawaiian chant)



When the voyaging canoe of the high chief Mō'ikeha approached Hawai'i Island in the 12th century, his foster son and navigator Kamahūalele, in an effort to convince the chief to settle here, chanted, "Eia Hawai'i, a he moku, a he kanaka - Here is Hawai'i, an island, a man." After sailing over 2600 miles of open ocean, their destination was finally in sight. Just like his Polynesian ancestors, who settled Hawai'i over a thousand years earlier, Mō'ikeha was an explorer, a risk-taker who was not afraid to find solutions to the problems facing him. In Mō'ikeha's case, his beloved wife Lu'ukia believed the lie of a jealous man, that Mō'ikeha was publicly defaming her, and decided not to make love with him anymore. She ordered her attendants to bind up her private parts with cord to prevent him from reaching them. When Mō'ikeha realized Lu'ukia was corded from her waist down to mid-thighs, with the ends of the rope hidden in this lashing so it couldn't be undone, he asked her to explain. After several nights of waiting for an answer, he let her know that rather than continuing to put up with this problem, he would go elsewhere.

Island In-Sight is a story about a journey of discovery, currently underway in the Hawaiian Islands, which is navigated by Hawaii's Indigenous population, the *kanaka maoli*, in an effort to find solutions to the problems faced by Native Hawaiians in education. For

many generations, people around the world have used stories to recall past accomplishments, explain current developments and insights, and share visions for the future. This is such a story, a story of Native Hawaiian exploration, to determine our own direction in education, trusting in the teachings of our ancestors to get us to our destination. After nearly two hundred years of forced assimilation through a Western school system, creating problems as impossible to undo as the pa'ū, or skirt of Lu'ukia, we have decided to set out on our own journey towards a quality 21st century Native Hawaiian system of education, which is culturally-driven, family-oriented, place-based, sustainable and autonomous, and based on our values, our traditions, our philosophical foundations, propensities, and preferences. This story tells the evolution of this Hawaiian system of Education with Aloha and the Pedagogy of Aloha, that has guided the conceptualization of this very successful new, yet traditional way of teaching and learning. Indeed, after decades of wayfinding, our destination is finally in sight.

THE GREAT INTERRUPTION

Kalo kanu o ka 'āina

Taro planted on the land - Natives of the land from generations back (Ancient Hawaiian proverb)

Like most Hawaiian stories, this story begins in antiquity, with the mating of sky father Wākea with earth mother Papa, resulting in the birth of the Hawaiian Islands, the birth of the first taro plant and the birth of the first Hawaiian. This cosmogonic genealogy firmly establishes our familial relationship as Hawaiians with one another, with the taro, our older brother, with the environment and with the gods. Moreover, the fact that all of the above are part of a genealogically connected family, continues to determine our behavioral expectations, drive our initiatives and influence everything we do, including the way we teach and learn.

Contact with the West in 1778, initiated a horrendous disrupt-

tion of our lifestyle of mutual care and reciprocity, which had evolved over thousands of years. As stated, this worldview regarded all other Hawaiians, i.e. all other human beings, as well as the land and the spiritual world as family. In fact, we had no concept of “the other”, until Westerners began to highlight perceived Hawaiian weaknesses, flaws and deficits, in an effort to make themselves look smarter, stronger, and overall better. Being perceived as this “other” in our home land, this less intelligent, less capable, less adept, and less academically inclined, caused a huge shock among Native Hawaiians, distressing most of us to the core. In fact, severe shockwaves are still being experienced by many Native Hawaiians, as we are exposed to ongoing discrimination in our homeland. Probably the most devastating impact has been the relentless prejudice experienced by Native Hawaiians within the Hawaii State Department of Education (HIDOE), Hawaii's singular public school system. This institutionalized racism has resulted in ongoing, well-documented inequities, which identify Native Hawaiians as the most under and uneducated major ethnic group in our island nation. In fact, decades of data, gathered by this author and others, place Native Hawaiians at the bottom of all positive educational performance indicators and on the top of all negative performance indicators, when compared to their non-native, multi-ethnic peers.

The failure of the HIDOE is particularly evident in rural communities with high concentrations of Native Hawaiians. Year after year, data confirms that public schools throughout Hawai'i, where Native Hawaiians comprise the majority, show higher rates of students who are not proficient in reading, math, and science, are chronically absent, have lower standardized scores on college readiness tests and must enroll in remedial courses when entering college. In fact, schools with 50 percent or more Native Hawaiians are twice as likely to be selected for restructuring, due to their ongoing failure to make Adequate Yearly Progress (AYP), than a school, which has less than 50 percent Native Hawaiian students. To boot, in most of these schools, over one third of the student

population receives special education services, and special motivation programs are made up often exclusively of Native Hawaiian students.

Not surprisingly, Native Hawaiian students labeled “deficient” by the education system, generally stem from families who are economically disadvantaged. This is a direct result of generations of Native Hawaiian public school students leaving the system without the basic skills necessary to earn living wages, not because we are less smart or less educable than Hawaii’s other ethnic groups, but because the HIDOE has been unable to provide the type of education that resonates with our way of learning and our propensities and focuses on things that are relevant to us.

Furthermore, the enforced shaming of Hawaiian identity and Hawaiian culture that continues even today within the public-school system and throughout Hawai’i, has affected Native Hawaiian sense of self and has disconnected many of us from our Native ways of knowing. This degrading of Hawaiianess has also been a significant contributor to the breakdown of our families, and a weakening of cultural and spiritual ties. Moreover, overt Americanization, initiated by the public-school system after US occupation in 1893, assured that Native Hawaiian children grew up with little awareness of our native language and traditional culture. So, it is not surprising that many Native Hawaiians today, regardless of age, know very little about our native culture and history, are unable to hold even a simple conversation in the Hawaiian language, or participate in Hawaiian protocol or other cultural activities. Many also don’t understand our ancient relationship to the land and to the taro, and the fact that an ancient proverb describes all who are considered natives of the land, as *kalo kanu o ka ‘āina*, or taro planted on the land.

CULTURAL REVITALIZATION

E kūkulu kumuhana! Let’s pool our strengths – physical,

*emotional, intellectual, spiritual – for a common purpose.
(Phase in ancient Hawaiian forgiveness and reconciliation practice)*

In the 1970s, the revitalization of traditional voyaging, set in motion a Hawaiian Renaissance, which continues today. As it happens, since 2013, two Polynesian voyaging canoes using only ancient ways of navigation, have been sailing across the earth’s oceans to grow the global movement toward a more sustainable world, a principle dearly embraced by our Hawaiian ancestors. There has also been a rejuvenation of Hawaiian language and culture, including *hula* (Hawaiian dance), chanting and other traditional arts, as well as a return to a traditional lifestyle we call *kū a kanaka*, to live as a Hawaiian. The Hawaiian renaissance also stimulated a push-back to overt Americanization, initiated with US occupation of our internationally recognized Kingdom of Hawai’i in 1893, which not only temporarily took away our sovereignty, but was also responsible for the near loss of our Hawaiian language and many cultural values, traditions, and practices.

To address this lack of Hawaiian knowledge, the Hawaiian Renaissance prompted the 1978 passage of Article X Section 4 of the Hawai’i State Constitution, which mandates that the State shall promote the study of Hawaiian culture, history, and language in the public schools. Even though the HIDOE has had 40 years, to date, no effective program has been institutionalized, as mandated. Because of this HIDOE violation of the Hawai’i State Constitution, the widespread, well-documented lack of knowledge of Hawaiian culture, language, and history, not just among Native Hawaiians, but all of Hawai’i’s public school graduates, continues.

So does the ineffectiveness of the HIDOE to meet the needs of its largest and fastest growing ethnic student population. This inability of the HIDOE to educate Native Hawaiians was exposed at length, as early as 1983, in a comprehensive educational needs assessment, which highlighted significant inequities in education

relating to Native Hawaiians and found that Native Hawaiians had educational needs that were directly correlated with our unique cultural situation. This study brought about the passage of the 1988 Native Hawaiian Education Act, which to date has provided about 1 Billion dollars for potential remedies to the challenges in education experienced by Native Hawaiian children and youth. Regrettably, the impact of the Act has been marginal, since most programs are unable to sustain themselves without federal funding. Moreover, because these funds are disbursed through competitive grants, conceived by disconnected Washington DC bureaucrats, they tend to pit Native Hawaiian organizations against one another, rather than encouraging a collective approach.

The Hawaiian Renaissance also gave rise to the Hawaiian language immersion movement, which began in the early 1980s, resulting in the establishment of the first Hawaiian language preschool in 1984, patterned after successful models created by our Polynesian cousins, the Maori, in Aotearoa (New Zealand). These Hawaiian language immersion programs, which today range from infant and toddler to doctoral programs, serve less than 5 percent of Hawaii's Native public school population. Over the decades, they have graduated thousands of fluent Hawaiian language speakers and prevented the predicted loss of the Hawaiian language, after the last group of native speakers passed away around the turn of the 21st century.

Hawaiian communities as well were being inspired by the Hawaiian Renaissance and began to initiate extra-curricular Hawaiian-focused programs, especially in areas considered cultural *kipuka*, or seedbanks. These still subsistence-focused *kipuka* suited perfectly to reconnect Native Hawaiian learners of all ages not just to their language and culture, but also to the land. These efforts included dozens of Hawaiian language and culture immersion summer camps started in the early 1990s in historic Waipi'o Valley on Hawai'i Island, based on the concept of *kūkulu kumuhana*, the pooling of strengths – physical, emotional, intellectual, spiritual –

for a common purpose. This purpose was to explore whether traditional ways of education practiced by our Hawaiian ancestors were still applicable today and could help Native Hawaiian students achieve success in education and in life. Conceptualized by a group of young Hawaiian language and culture experts, including the author, these camps generally lasted for one moon cycle and seamlessly integrated all content areas into daily subsistence activities.

From the very beginning our real-world, place- and project-based *Kūkulu Kumuhana* camps confirmed that in education, ancient is modern. This realization that ancient is modern is at the center of Hawai'i's Indigenous education movement. Year after year our action research validated that the hands-on, applied ways used by our ancestors to pass on their knowledge, not only still worked very successfully today, but will always be the best ways to educate our next generations, because they are grounded in thousands of years of intense and purposeful action research prompted by an innate search for wisdom and righteousness or *pono*. Moreover, our research revealed that many educational strategies practiced by our Hawaiian ancestors are considered best practices today and found to be highly effective to meet the needs of 21st century Native Hawaiians – and others.

These camps also affirmed that Hawaiians learn best in a familial, caring atmosphere, where all members are treated with aloha and respect. This was especially evident at the *hō'ike*, a traditional Hawaiian assessment practice, known by modern educators as a performance-based assessment to an authentic audience, which concluded each camp. These *hō'ike* allowed participants from toddlers to elders to exhibit their learning to families, friends, and the Waipi'o community, who were amazed at the astonishing growth demonstrated by all learners academically, culturally, and personally. Over the years, these summer camps expanded from Waipi'o to other districts of Hawai'i Island and even to other islands. This implementation in other locations clearly showed that Hawaiian-focused curriculum must be place-based. This means that the

resources of each particular place shape the learning processes, as students learn the histories and the stories of their community, explore community resources, solve community problems, and envision community futures.

In 1997, the lessons learned through our Kūkulu Kumuhana camps were integrated into the design of a Hawaiian-focused Academy, a 9-12 school within a public high school on Hawai'i Island, founded and managed by the author. This highly successful Hawaiian Academy substantiated that Hawaiian-focused education can also be academically rigorous, refuting the general bias among public and private school teachers and administrators, that Hawaiian-focused education was remedial, lacking rigor and merit. In 2000, the Hawaiian Academy transitioned to the first of over a dozen Hawaiian-focused public charter schools on three islands, which collectively serve over 2000 Native Hawaiian students annually. In 2009, this thriving K-12 school, founded and directed by the author for its first 10 years, received a full 6-year WASC accreditation and in 2010, its 250 students moved into Hawaii's first platinum LEED certified educational facility, part of an intergenerational *kauhale*, or Hawaiian learning destination, conceptualized by the author.

To address other Native Hawaiian communities needs in education, the author also conceptualized and established an innovative Hawaiian-focused teacher licensing cohort, as well as the first bi-lingual Hawaiian-focused 0-5 early childhood education program. More recently, the author designed an interactive, online Basic Hawaiian language and culture program, which complements the hands-on learning approaches implemented in our family oriented, place based Hawaiian language and culture immersion camps, and provides learners of all ages unprecedented online opportunities to learn Hawaiian language and culture on your own time and in a safe environment.

THE EMERGENCE OF PEDAGOGY OF ALOHA

Ua ola loko i ke aloha. Love gives life within. Love is imperative to one's mental and physical welfare. (Ancient Hawaiian proverb)

To validate the effect of these various Hawaiian-focused programs on Native Hawaiian learners, the author in 1996 began to design and implement, as part of her doctoral research in Indigenous Education, a longitudinal Indigenous action research project. Using both qualitative and quantitative data, this research has been measuring the impact of Hawaiian-focused education on Native Hawaiian learners of all ages for nearly 20 years, clearly validating that Native Hawaiians prefer Hawaiian-focused models of education and that we can succeed in education, when it is done our way. It also resulted in the evolution of a uniquely Hawaiian research methodology called *Mā'awe Pono*, which aligns with emerging Indigenous research methodologies worldwide.

The author's research also resulted in the discovery and articulation of a Pedagogy of Aloha, which has become the foundation for the Hawaiian-focused education movement. Pedagogy of Aloha stresses the imperative of the Hawaiian value of *aloha*, which can be defined as love, compassion, affection, kindness, charity and much more, in Hawaiian-focused education. This value of *aloha* has permeated Hawaiian education since the beginning of time. Our ancestors captured this notion that *aloha* is essential for success in education and in life, in the proverb, *ua ola loko i ke aloha*, which can be translated as, love gives life within, and reminds us that love is imperative to one's mental and physical welfare. The encouragement to *aloha* others is also reflected in the ancient proverb *aloha kekahi i kekahi*, love one another. This treatment of others with compassion and respect is manifested in Hawaiian-focused education through the cultivation of loving, caring personal relations between all stakeholders and an environment of mutual support and assistance throughout the learning process. Modern educational jargon refers to similar approaches as Pedagogy of the Heart, or Affective Education.

Interestingly, data as far back as the first immersion camps, validate that an atmosphere of mutual respect and reciprocal care is integral to a successful learning experience. Yet, it took the author nearly a decade of action research, gathering and analyzing mountains of quantitative and qualitative data, including personal observations, interviews, surveys, and informal discussions with hundreds of Native Hawaiian co-researchers, to officially declare, that for Native Hawaiians, academic success necessitates first and foremost the presence of *aloha*.

As simple as it may sound, this research-based acknowledgment, that *aloha* is the solution to the complex and complicated problems facing Native Hawaiians in education is actually rather profound. For one, it points directly to the power of our ancient values and cultural practices to solve modern problems. It also makes it clear that the primary resource, the most important ingredient to a successful education, is not only free and abundant, but that it lies within all of us, waiting to be cultivated. This goes especially for Native Hawaiians who are known internationally for our *aloha*. Also, excitingly, the solution to our quandary in education is not a finite resource, that we have to fight over with others, or a resource that can be depleted and used up over time. As it happens, *aloha* actually increases, as it is circulated and shared with others.

Today, countless qualitative and quantitative, internal, and external data confirm that *aloha* is indeed, undeniably the solution. In fact, teaching and learning in an atmosphere of *aloha*, which has since become known in Hawai'i as Education with Aloha (or EA for short) has been successfully implemented not just at Hawaiian-focused charter schools, but also in many other Hawaiian-focused programs. By tenderly nurturing and supporting all learners and immersing them in an environment permeated with *aloha*, where everyone feels loved and safe, these programs are able to reach even the most alienated learners.

Growing such a culture of *aloha* requires conscious efforts on many levels. This includes prioritizing the establishment and maintenance of amicable relations among all involved in the educational pro-

cess, over things like test scores, grades, or being right. It also involves making sure that issues are addressed expediently using traditional methods of problem resolution, and selecting teachers and teacher candidates based on their compassion and love for Native Hawaiian children and youth. This is done with the understanding that specific skillsets relating to education can be taught, whereas *aloha*, or unconditional love for all learners and a firm belief in the innate goodness of children and youth, is something the teacher must already have.

Establishing a culture of *aloha* also includes using familial terminology like *kupuna*, or grandparent when talking to elders, uncle and aunty to address adults, including teachers and administrators, and brother and sister to refer to peer learners. The practice to address one another using family terms is still common among Native Hawaiians today, with youth, at least those who were raised with Hawaiian values, required to *honi* (kiss) a Native Hawaiian adult when they meet and refer to them as uncle or aunty, regardless of any known blood relationship. By using family terms, Education with Aloha establishes familial, reciprocal relations that continue even after the learner graduates.

This Hawaiian concept of reciprocity is articulated in the proverb, *kōkua aku, kōkua mai, pēlā ihola ka nohona 'ohana*, which translates to, give and receive help, such is family life. Establishing and maintaining reciprocal relations among families of learners is reflective not only of our traditional ways of education, but also supported by longitudinal Western research. Education with Aloha includes lots of group work, peer teaching, collaborative projects, collective demonstrations of knowledge, and multi-age and intergenerational learning. Like it was among Hawaiian families of old, the more seasoned and experienced learners are expected to take care of and support newer learners, while junior learners are expected to watch and learn from the actions of their seniors.

Education with Aloha also advances the practice of *aloha* between Native Hawaiian learners and the other descendants of sky-father Wākea and earth mother Papa, which include the land, and the taro, our older brother. By integrating the environment at an

extremely high level, Education with Aloha helps learners to re-establish a reciprocal, familial relationship between themselves, the physical environment, and the spiritual world, confirmed by our cosmogonic genealogies. Moreover, placing learners into multi-age cultural learning experiences in the environment teaches them not only how to take care of the land, but allows them to develop a deep love for the land, known as *aloha ʻāina* in Hawaiian.

Education with Aloha also embraces the concept of applied education, reflected in the Hawaiian proverb, *ma ka hana ka ʻike*, which means through work comes knowledge. This very hands-on traditional approach to education is defined today as Experiential Education, Practical Education, or Hands-on Education. For Education with Aloha learners this means participation in a variety of projects, internships, service learning and multi-year mentorships. These real-world experiences build on Hawaiian educational practices like *nānā ka maka, hana ka lima*, which literally means, the eyes look and the hands do, and refers to a way of learning that involves demonstration, followed by immediate application of knowledge. This concept of practice before theory distinguishes Education of Aloha as an Indigenous model of education.

TOWARDS A HAWAIIAN SYSTEM OF EDUCATION

E kanu i ka huli, ʻoi hāʻule ka ua. Plant the taro stalk while the rain is falling. Do your work when opportunity affords. (Ancient Hawaiian Proverb)

Over the past fifteen years, Education with Aloha has clearly established itself as a viable, much more successful way of education than the HODOE approach, when it comes to meeting the needs of Hawaiʻi's 70,000 plus Native Hawaiian public school students. In fact, culturally-driven approaches have been validated not just here in Hawaiʻi but throughout the Indigenous world. Yet despite this unprecedented success, a perplexing lack of systemic support, evidenced in ongoing inequitable, insufficient funding and ever increasing suffocating bureaucratic red tape continues. This systemic

resistance to change, even when it directly benefits those the system is tasked to serve, but has not been able to, prompted the author to leave public education in 2010 and commence the design of an independent, self-sustaining system of Hawaiian-focused education. By creating a prototype able to sustain itself with minimal external funding, the author hopes to overcome a gigantic obstacle, namely the dependence on outside funding, which has so far prevented Native Hawaiians to take control over our own processes of education.

Already in 1997, a report by the federally funded Native Hawaiian Education Council recommended the creation of a Native Hawaiian system of education that was culturally driven, family oriented and community based.

Creating an independent Hawaiian system of education also aligns with an international right passed by the United Nations in 2007, and signed by President Obama in 2014, which validates the right of Indigenous peoples, including Native Hawaiians, to establish and control our own educational systems and institutions providing education in our own languages, in a manner appropriate to our cultural methods of teaching and learning. In addition, the United Nations Declaration of Rights of Indigenous Peoples (UNDRIP) clearly specifies that Indigenous peoples have the right to revitalize, use, develop, and transmit to future generations our histories, languages, oral traditions, philosophies, writing systems and literatures, and to designate and retain our own names for communities, places, and persons.

As Hawaiʻi's natives of the land from generations back, referred to in our proverbs as *kalo kanu o ka ʻāina*, or taro planted on the land, Native Hawaiians have not only the right, but the responsibility to create our own processes of education. Such a move would also align with the ancient proverb, *E kanu i ka huli, ʻoi hāʻule ka ua*, which means plant the taro stalk while the rain is falling, or engage when the opportunity presents itself. Such an opportunity is emerging now, prompted by the implosions of outdated Western education systems, rendered obsolete several decades ago, which at this point

are focusing primarily on serving themselves and making sure the machine stays alive, rather than meeting the needs of their learners. As the failures of the current systems of education are exposed, the previously unshakable faith of the general public, including Native Hawaiians, in the virtue and validity of public education is slowly eroding. This widespread belief that the current system of public education is the only possible way to educate has seriously hampered efforts to introduce innovations that are outside of current HIDOE practices. In other words, change is supported, as long as the power remains with a central agency in urban Honolulu, and as long as “highly qualified” teachers – who may not at all be highly effective – teach one specific subject to 30+ same-age students for one period per day, in classrooms with year-round inside temperatures in the triple digits.

Hawai'i's system of Education with Aloha supports a radical modernization of the education process, which aligns with extensive modifications in banking, medical care, communications, and other aspects of life. This means an exploration of new ways – which in our case are frequently also ancient ways – to address the needs of modern Native Hawaiians and the communities we live in. In fact, one main idea advanced by Education with Aloha is that a Hawaiian system of education must be community-based. This means rather than a top-down system centered in Honolulu, an urban metropolis, disconnected from rural Native Hawaiian realities, Education with Aloha advocates for each Native Hawaiian community to chart their own course of education, doing what is best for their learners, and utilizing the unique resources and assets available to them. That is to say, the extended Native Hawaiian community of elders, uncles and aunties, children, and youth, becomes the backbone of our Hawaiian system of education.

Employing a bottom-up process allows communities to control the education process at the community level and come up with steps that allow them to reach their milestones. At the same time, while the decision-making power, resource allocation and educa-

tional authority is rooted in the community, a fluid, flexible, centralized system of technical support and assistance is being designed to provide the necessary back-up, help and support of Hawaiian communities as needed. Bottom-up management allows communities to fully utilize their unique resources as they create relevant, place-based models of education, which center on students learning about their place and finding solutions to environmental, social, and cultural issues facing their communities. Our research also shows that bottom-up approaches in education not only build moral, but also improve productivity, since the trust placed in individuals inspires them to strive harder to reach goals and objectives in ways that work best for them.

These community-based approaches must be culturally driven, incorporating the skills and talents of members knowledgeable about Hawaiian language, culture, and traditional practices, but not necessarily “highly qualified” by Western standards. Involving such cultural experts at a high level in the education process has been found extremely successful, since, in general, these cultural practitioners, because they are grounded in Hawaiian values, are not only very effective, but accustomed to delivering rigorous content in an atmosphere of *aloha*. Culturally driven to us means that not only is the pedagogy Hawaiian, but the curriculum as well, focuses on the revitalization of Hawaiian language and culture. In fact, all content explored begins and is centered in a learner's place, radiating outward in concentric circles. Our research has found that the more Native Hawaiians know about our impressive culture and history, the more we feel good not just about being Native Hawaiians, but about themselves as valued and important individuals.

This kind of self-confidence has been found to have significant impact on almost everything a person does, including the way they engage in activities, deal with challenges, and interact with others. Self-esteem has also been found to have a marked effect on academic performance. In other words, while low self-esteem generally lessens students' desire to learn, their ability to focus, and their willingness

to take risks, positive self-esteem, on the other hand, provides a firm foundation for learning and is one of the building blocks for educational success. Moreover, knowledge of the Hawaiian language helps Native Hawaiian learners gain an understanding of our traditional values and ways of thinking, and the reasons we do the things we do. Culturally driven also means that our assessment is grounded in traditional practices like *hō'ike*, known as performance-based assessment to an authentic audience.

A bottom-up approach is also family-oriented in that it supports the involvement of entire families in the educational process. In fact, one long range goal of Education with Aloha is to reestablish the family unit at the heart of the educational process. In traditional Hawai'i, the family unit, i.e. parents and grandparents, assisted by uncles and aunts and other extended family, provided the educational foundations. From there the youth entered into special training with masters in various skills of economic enterprise. Reengaging the family in the education process, by providing multi-age, intergenerational learning opportunities, such as family oriented Hawaiian language and culture immersion camps and mentorships is vital, because our research shows that Hawaiians learn best in a familial, caring atmosphere of aloha and respect, where responsibilities are clearly delineated based on traditional family hierarchies.

To implement such community based, family oriented models of teaching and learning, Education with Aloha advocates for the creation of *kauhale*, or intergenerational learning destinations in Native Hawaiian communities, where learners of all ages can gather to practice Hawaiian language and culture. These *kauhale* allow learners to tap the strengths found in Native Hawaiian individuals, families and communities and use these strengths to build strong cultural, social, economic, and spiritual foundations, deeply rooted in the resources and assets found within each Hawaiian community. Throughout Hawai'i, native communities have already begun to create such family-oriented *kauhale* or learning destinations, which bring Native Hawaiians together and allow them to learn things of

interest, not just in regards to Hawaiian culture and language and their place, but also things like technology, financial literacy etc. Generally, these *kauhale* house diverse education programs and social services, including infant and toddler and early childhood opportunities, K-12 schools, as well as post-secondary, workforce development and community education programs.

In addition to providing educational opportunities, these *kauhale* are also centers for community innovation and entrepreneurial ventures, designed to assist with community self-sustainability efforts. Our research over the past decades confirms the dire need for fiscal sustainability. In fact, data indicate that dependable, long-term revenue streams of equitable funding are necessary to implement high quality Hawaiian-focused models of education at the community level. In 1999, Native Hawaiians, led by the author, joined the charter school movement, because we were excited by the innovation and flexibility promised by the charter school law. We also believed that, as promised, educational dollars would follow the child. However, although Native Hawaiian students at Hawaiian-focused public charter schools continue to outperform Native Hawaiians at DOE public schools, the expected equity in funding was never honored by the HIDOE. Inadequate and tenuous funding also severely restricts the potential of most other public and private Hawaiian-focused educational programs today. Because we have learned that we cannot depend on outside funding, the need to create a self-sustaining system of Hawaiian education is paramount. This is being done by involving students and community members in creating income-generating social enterprises that benefit the community by providing jobs, on-the-job training, ongoing revenue streams and assist with financial security.

Another area of sustainability addressed by Hawaiian *kauhale*, or learning destinations concerns food sovereignty. Actually, the *kauhale* model not only teaches learners how to grow food and other essentials, but also provides areas where Native Hawaiian community members can cultivate the plants they need for subsistence, cultural

practices, as well as entrepreneurial ventures. Our Hawaiian system of Education with Aloha also aligns with State of Hawai'i goals to double local food production from 10 to 20 percent by 2030 and aims to play an intricate part in the reestablishment of food sovereignty and a self-sustaining island economy.

Research by this author, over the past 30 years, undeniably confirms that a system of Hawaiian Education with Aloha must be autonomous. In other words, such a system can be successful, if Hawaiians are given complete autonomy to create education models the Hawaiian way without outside interference and limitations, like "common" core. Interestingly Education with Aloha or EA for short, means sovereignty in Hawaiian, an implicit declaration that one aspect of Education with Aloha is the extrication of Native Hawaiians from a system that is demonstrably unable to address the unique needs of its largest ethnic student population. While it was hoped that charter schools would have the promised autonomy for Native Hawaiians to design and control our own education, the red tape imposed by the State of Hawai'i on its charter schools since 2000, which is continuously increasing, make it clear that only complete autonomy from the HIDOE will allow for the academic freedom necessary to design and implement successful Hawaiian-focused processes of education.

At the same time, Native Hawaiians have been discovering our need to design our own autonomous system of education, we have also been discovering facts about our history, hidden by those in power, that clearly reveal the resistance of our great-grandparents to US annexation efforts. Furthermore, we have learned about the illegal actions of the US to take over the globally recognized, independent Kingdom of Hawai'i, violating their own laws, which affirm our international, human right to political independence. While various Hawaiian sovereignty movements have been underway for decades, more recently passionate Native Hawaiian calls for complete independence from the United States have been surfacing throughout the archipelago. In fact, during a 2014 visit to Hawaiian homestead

communities, the US Department of Interior was met with overwhelming demands for immediate de-occupation.

These demands to become once again independent are increasing among Native Hawaiians, who make up nearly 25 percent of Hawai'i's multi-ethnic population, as economic hardships continue to rise, because of the high cost of living in Hawai'i, which is among the highest in the United States. 2010 statistics show poverty rates among Native Hawaiians at 39 percent compared to the state average of 10 percent, making Native Hawaiians the most socio-economically disadvantaged ethnic group in Hawai'i. In addition, with Native Hawaiian families tending to be larger than average, our comparatively low income must support a higher number of individuals. Because of the high cost of living, homelessness since 2013 has increased 68 percent, with 33 percent of the homeless being of Native Hawaiian ethnicity. Destitution also impacts crime statistics, with Native Hawaiians making up over 40 percent of incarcerated men, women, and youth. Finally, Hawai'i's high costs of living have forced nearly 50 percent of Native Hawaiians to relocate to the US continent, resulting in a huge brain drain, on one hand, and a further disconnect of 250,000 Native Hawaiians from our traditional practices and our native roots.

These and other statistics unmistakably indicate that US occupation and the introduction of Western economic principles and a Western system of schooling have not benefitted Native Hawaiians. In fact, data points to an enormous need for initiatives that reconnect Native Hawaiians to our traditions and practices, including our ability to converse in Hawaiian, so that we can again *kū a kanaka*, or live like Hawaiians. These initiatives must go beyond creating disconnected educational opportunities, what we call band-aid approaches, which have been the norm to date, but rather focus on the creation of a comprehensive system of Hawaiian education that builds on the cultural and social strengths that form the foundation of Native Hawaiian families and communities. Education with Aloha asserts that by investing in Native Hawaiian human capital, i.e.

the skills, knowledge, and experiences possessed by Native Hawaiians and our history of resistance and resilience, we can create not just a self-sustaining Hawaiian system of education, but also assist in the re-establishment of thriving Hawaiian communities and an independent Hawaiian nation.

CONCLUSION

Pipi holo ka'ao. Sprinkled, the tale runs. (Traditional ending of Hawaiian stories)

Three decades of intense Indigenous action research, involving thousands of Native Hawaiian learners of all ages, has provided Native Hawaiians, including this author, with remarkable **insight** as to what constitutes quality 21st Hawaiian education. This includes understanding that teaching and learning are dynamic, non-linear, spiraling processes, that build on past experiences to seek solutions for the future and that it is vital that all involved in the educational process are valued and supported. In addition, our action research not only informs our Pedagogy of Aloha, but has resulted in an organizational setup, which is based on a collective upbringing, assures that all work is culturally-aligned, and has value and positive impact.

It has also provided us with a clear picture as to what a prospective system of Hawaiian education should look like. In other words, our island is **in sight**. We know where we are going and we know what to do when we get there. What we need now is a wind that pushes us forward and gets us to our destination. This wind may come in many forms, and may include angel startup investing, social impact bonds, vouchers, partnerships with existing organizations, and/or other start-up funds and resources required to design and implement a ten-year pilot of our Hawaiian system of Education with Aloha, as explicated in this story.

However, we are not going to wait for these funds to materialize themselves. Native Hawaiians have waited long enough for the HDOE and others to fix their inability to provide our youth with a qual-

ity education. For decades, we have watched highly paid education experts from Ivy League Universities on the continent come and go, and come again – yet our statistics remain the same. In 2010, the HDOE received \$11 million in federal School Improvement Grants to turn around its persistently lowest achieving schools. Yet, according to a January 2017 US DOE report, entitled School Improvement Grants (SIG): Implementation and Effectiveness, these funds, and the rest of the \$7 Billion invested in education by the Obama Administration, had no significant impacts on math or reading test scores, high school graduation, college enrollment or student achievement in general.

Over three decades of research confirm that by looking to the past, Native communities can create quality Indigenous models of education that are at once practical, skill-oriented, environmentally aware, and conservator-cognizant. Other factors known to contribute to exceptionally positive Native Hawaiian learner outcomes are a relevant, culturally-driven, place-based curriculum, performance-based assessment, and a high level of family involvement in the educational process. Moreover, current research in Hawaiian epistemology, substantiates that modern Hawaiian models of education must reflect, respect and embrace Hawaiian cultural values, philosophies, and ideologies, which have guided us for thousands of years. These values will continue to guide us as we continue to expand our independent, self-sustaining system of Education with Aloha, known as EA, as part of our quest for independence. This story concludes with a phrase used commonly at the end of Hawaiian narratives, which denotes that this story is not over. In fact, our tale of Education with Aloha is continuing as we speak, with more and more Native Hawaiians coming together to pool our strengths and empower ourselves by returning to a lifestyle we call *kū a kanaka*, anchored in traditional Hawaiian values, cosmogonic genealogies, traditional stories, and practice, passed down within *kanaka* families from generation to generation.

Pipi holo ka'ao. Sprinkled, the tale runs.



THE SOCIAL INNOVATION ACADEMY IN UGANDA

EDUCATION FOR JOB CREATORS
INSTEAD OF JOB SEEKERS

Philipp Mäntele

Cool air is blowing through the open window of the 1987 Toyota Pickup. It is 3:48 in the morning and still dark outside. I had just landed 45 minutes ago in Uganda after an eight hour overnight flight. Miiro, a facilitator of the Social Innovation Academy (SINA), was waiting for me with a big smile at the arrival hall.

Still almost asleep, I was very happy to see him because otherwise I would have had to spend at least 10 minutes explaining and bargaining with one of the taxi drivers hauling around the arrivals. I would have to explain that I am not a tourist, that I know the fair prices and the distance. With Miiro I can just be myself, but unlike me, Miiro is full of energy and happily driving the car around potholes and over countless speed bumps. Where does he draw so much energy this early, especially since he had not slept? Our 90-minute drive takes us from Entebbe Airport at the shores of the mighty Lake Victoria through Uganda's capital Kampala, to a small town almost exactly at the equator line: Mpigi.

This early in the morning Kampala's streets are already full of life, but at least there is no traffic jam now, quite in contrast to daytime, where the journey from the airport can take up to four hours. I once had been told that there is also a shortcut directly from the airport to Mpigi Town, but Miiro says using a shortcut is not always the best idea.

A few minutes after the small town center of Mpigi, up on top of an idyllic hill, we arrive in SINA. It is 6 o'clock in the morning. The sun has not risen yet, but some light is coming to glow behind the hills in the distance. In the same direction, I can already see two people carrying tools and construction material. While they are getting closer, I recognize Robbin and Henry, and I am confused what they are doing so early. They greet me very happily and explain that they decided to tackle the lack of living space in SINA by building some more huts. Local huts in the style their great-grandfathers used to do, an indigenous technology using mud, grass, wood and other natural materials to construct houses with a natural air conditioning. Unfortunately, this building technique has become rare since iron sheets became prominent. When the equatorial sun is hitting the iron sheets they heat up the room quite extremely, but people prefer them as they are longer lasting than grass.

Henry tells me that because they have a lot of tasks and responsibilities during the day, they committed themselves to building the huts in the morning hours. Robbin explains that he had learned how to build those grass thatched houses in his family from a tribe that still constructs in this way. Henry became interested in the idea and offered his help, while also learning more about this construction technology. Robin calls Henry a very good student and tells me that he is tough on him if he wakes up late. I am smiling because actually, Robbin is a student and Henry a teacher. I already feel back at home at SINA, and I again have to remember to replace the words "teacher and student," with "scholar and facilitator", or simply "learners". I was educated in a so-called "typical" German school, conditioned to believe that knowledge comes from a teacher or a textbook. Still having a smile on my face, I realize that other people are also already awake. The kitchen area is already full of life. As I get closer, I can smell the frying pan and I can see people preparing food. It is the cooking team, comprised of scholars and facilitators with an interest in cooking and setting up a professional restaurant. They are preparing breakfast today.

Setting up a restaurant and creating new jobs at that moment reminded me where the whole idea of SINA was born. It was a 2-day workshop where a group of 15 scholars shortly before or after their A-levels met to tackle a challenge of 83% formal unemployment among youth in Uganda. The rigid education system in Uganda is training people to become employees in an industry that is not present in the scholar economy of the country. The participants wanted to tackle this misfit by releasing the scholars from the rigid system and empowering them to create their innovative jobs based on local potentials. These businesses should not only benefit the scholars but also the social surrounding. The idea to foster social entrepreneurship was born. Cooperation instead of competition.

While we unpack my luggage, I can hear several phone alarms ringing, coming from "Nigeria" and "Bangladesh." All rooms have country names, as SINA's buildings are arranged a little bit like a world map. More and more people are waking up and are filling SINA with life. I see some people checking if their neighbors have also realized that a new day has started. "Good morning" is heard in several languages. I pack my luggage into "Kosovo" and join the group for breakfast.

I recognize a lot of faces, and the known ones welcome me as if I haven't been away at all. I get introduced to several new scholars. A while ago I have seen pictures of a scholar selection, but actually getting to know these persons makes me feel happy. I remember the time when we developed the first facilitator and scholar selections. We planned days full of team activities and cooperation. In the evenings after those selections the participants didn't want to leave, and new friends exchanged contacts. As far as I am aware, two other NGOs have been found after those days because people with similar interest got connected. We had no formal requirements and only concentrated on soft skills like teamwork.

At 8:30 AM I am heading towards the learning village. "Canada" is freshly mopped and I see people taking off their shoes when en-

tering. After the last pair of shoes has been removed, all members of SINA gather for a morning meeting inside a plastic bottle house.

The walls surrounding me are made from thrown away PET bottles, which are normally being burnt in front of people's houses releasing high toxic gasses. The bottles have been filled and compacted with soil. This keeps the building cool and strong. The hut was built by scholars and facilitators, while also getting support from the local community. The realization that waste can be a valuable resource spread quickly since the beginning of the bottle construction in July 2014.

The floor is made out of plastic bags and egg shells combined with white cement, - an idea that was brought and implemented by a facilitator together with three scholars. This idea became SINA's first social business. The team has set up a factory in Kampala and has started laying floorings, and the invention was even patented. The roof above is another great idea from a volunteer. It is made out of old car tires that make up roofing shingles. To complete "Canada", 16.000 plastic bottles, countless egg shells and 400 car tires were used. While everybody in the hut is getting seated, I observe the bottle caps in all their various colors. As I am getting lost in this mosaic, I remember all the moments of construction when we celebrated teamwork, but also the moments of failure.

"USA" was the first hut we constructed, and we first tried applying the bottles instead of burnt bricks, which previously contributed to deforestation. We were confident about our work until our civil engineer suggested many challenges. Construction came to a hold because the walls and pillars could not be trusted to support a roof. This was a learning experience not only for me. Together we decided to create outside pillars and a veranda to hold the roof. Incorporating all mistakes as learning, the pillars were constructed very strongly and now hold an impressive grass roof, and are four meters high.

While I am thinking that this is what learning is about, overcoming barriers and drawing valuable lessons from failures, I get

pushed out of my thoughts by my neighbor Henry telling me that today Kato set the goal to overcome his shyness and had the idea of creating and presenting SINA's news: updates, challenges, problems, achievements and insights into projects that are happenings at SINA. In the last personal coaching session Henry had with Kato, he had reflected on things he could do to gain more self-esteem and bring out his creativity.

Kato starts: "I am Kato, and today I will present you the burning news of this week." While he is speaking his eyes focus on the notes he is holding in his hands. I feel that he is nervous, for sure he is out of his comfort zone. But he continues...

"Today there will be sunshine and a light wind from the North-east while the temperature will rise up to 23°C. Yesterday SINA's soccer team scored 4:3 against the local "Boda Boda" drivers. Now in a row of 4 games, SINA's soccer team hasn't been defeated still. I congratulate all the players and also all people that supported our team during the match. The SINA village takes shape: 5 of the 6 huts have been finished already. As mentioned before we mainly want to use those huts to host tourists and guests and therefore resolve our issues with limited space a little bit. At the same time, the construction of the main hall is taking place. The interlocking stabilized soil bricks. This project has already produced a good number of bricks that will be used to build the main hall. Our biogas engineers made progress in maintaining the biogas plant, and the production rises. The biogas group invites everybody to continue donating." A short pause occurs, and I can see Kato having a smile on his face. I can feel how he gets more and more confident speaking in front of the group. "The jewelry project has new necklaces and bracelets and offers them now in the cafeteria, as well as in their online shop. This is Kato, your weekly news anchor wishing you a fruitful day."

In the next personal coaching session, Kato will reflect upon this moment and decide what his next steps are. Henry is not defining the way for him at this moment, but assisting Kato in over-

coming limiting beliefs and creating steps on his journey towards achieving his dreams.

After the morning meeting, I see people spreading in all directions. It is skills time, and Josephine is inviting me to join her in the crafts project. After entering “Mexico”, I am surrounded by different kind of crafts. I see somebody working on a sewing machine, people practicing bookbinding and also a small group that is sitting together and discussing marketing of their produced earrings, bracelets and necklaces. I am not confused by the variety of activities, but I wonder if the idea behind those skills is still the same. So I am asking a group of scholars what picture they get.

“There is a variety of skills to get various insights, but I like the jewelry project the most.”

“First I thought it is all about practical skills, but now we are also doing marketing.”

“First I couldn’t think about construction, but then I got the feeling that there is much more than physical work.”

Hearing these opinions makes me feel happy because my need for reflection is met. As we started with the skills, we thought that getting insights in different skills could open up a wider perspective of professions for the scholars. But as the skills were going on we realized that the wide variety of activities within each skill was even more useful. Realizing that construction doesn’t only consist of setting a brick on brick opened up a whole new perspective for collaboration and teamwork.

While walking towards the area of “Africa”, where the guest village and the animals are located, I meet Ruth. When I ask her which skill she is coming from, she tells me that today she has not been in the skills class at all, but that she has arranged an interview with a doctor for her Sex-Education-App. I become interested. I already heard about her idea from others but have not understood the details, and so I ask her to explain more. She starts to speak about culture, awareness, misconception and her personal story. I know she received training in pitching her idea

to get it funded and to get started. I am eager to hear more about her idea and see how she is going to present it.

“I grew up in an orphanage home in Uganda. My parents passed away when I was young because of AIDS. The orphanage supported me until the end of primary school. After primary school, I did not know what would come next. A German NGO believed in me and supported me in pursuing secondary education. I had to make sure to use this opportunity and worked hard. I became one of the best students in the entire school. Because of that, I was able to join the Social Innovation Academy after my A-Levels. My sister also died of AIDS, but before she died she lost a lot of hair and weight, and her skin was covered in rashes. The neighbors in our village thought that it was witchcraft or a curse because she was too young to have had sexual encounters. She was taken to a shrine to be cleansed, but it was all in vain. Pamela was born with HIV. She died at an early age because of ignorance and a lack of sensitization and awareness of HIV. She could have been saved if treated by doctors instead of witchcraft. After that, I developed a strong interest in medical issues. In Africa, it is normally the auntie and uncle who pass on sex education to girls and boys respectively. However, uncles and aunties are neglecting their role more and more. The topic is also not covered in schools anymore because it is not found as academic. Based on this experience, I have done extensive research inquiring from different groups of young people on what they know about sexual reproductive health. I was shocked by the amount of false information people truly believed in. For example: when you sleep with a virgin, you will get cured of HIV. The stigma about HIV is especially strong, and many people believe that it is possible to get HIV from sharing a glass or a plate with an infected person.”

I am very touched by Ruth’s story and impressed by her self-esteem and her drive to be a change agent. HIV is still a big challenge, and many people are dying of it every day, although treatment is available. In Kampala, big banners encourage people to receive

treatment. While I have been speaking with Ruth the skills time was over, and now all the members were taking time to structure their own program. I can see people working on their projects, being mentored or working within learning groups.

Brian comes around and invites me to a meeting of the Facilitation learning group. In SINA, learning groups do the same work as divisions in a normal company would do. Each SINA member is bringing his or her experiences and talents into a learning group. And so it happens that trained accountants, as well as scholars, are working together on the accounting for the entire academy. The learning groups have one structured meeting at the beginning of each week where they discuss what needs to be done and the rest has to be organized by the group itself. Giving the individuals back the responsibility to structure their own time is a great learning experience. When the scholars leave the academy, they will have learned to structure their time efficiently. I am sitting in the meeting, and after old tasks have been followed up, new challenges are identified, and the group members assign themselves new tasks.

The clock turns 1 PM, and everyone of all 50 people living and learning at SINA are meeting for lunch. I can see a line of people growing fast in front of the wooden structure. The smell of fried onions and steamed potatoes fills up the air. Constructed out of rough wooden blanks that have been left over from construction, the kitchen consists of an open serving area and a wind-shielded cooking side. Heavy aluminum pots get lifted from the biogas stove up onto the counter. Rose removes the lid of a pot and reveals banana leaves. While she is unfolding the leaves, she uncovers smashed matoke, one of the favorite side dishes among the members. After the people have fetched food, I can see them sitting together in small groups. During the whole lunchtime, I'm trying to get to know what have happened in the lives of my friends. The time is running by, and soon I see people carrying their empty plates back to the kitchen area.

Once a week all members are meeting to the project presentations. At 2 PM all members are gathering together in the learn-

ing hut and starting to present their projects. Some ideas are still quite fresh while others have already built prototypes. I am curious about their ideas, and so I follow them attentively. Ruth who has shared her story with me this morning stands in front of the other members and presents her idea: "My idea is to promote reproductive health through creating a Sex Education App. From the interviews I held, most young people are too shy to speak about sex in Uganda and end up believing in common myths. The false information stigmatizes people and causes severe harm. The HIV rate is high, teenage and unwanted pregnancies are common, and discrimination of women is a prevalent problem. The App could provide true information to East African youth, debunk myths and serve as an interactive platform to pose questions to medical specialists anonymously, whenever and wherever people need it, without fear or shame. Users get immediate responses which could save them from HIV transmissions, early pregnancies, STDs, etc. A quiz-like game could make it fun to know the truth. For rural people without smartphones, we could also set up an SMS service, where people can ask their questions and get SMS answers back instantly. This service could be charging a small fee per SMS, and that is how running costs could be covered."

Using the projector and manila paper, she shows first sketches of the user interface. The audience can get an overview of the topics that she wants to cover with her app. Ruth finishes her presentation by thanking the audience.

Immediately, several listeners raise their hand. By sharing inspirations and feedback, they show respect for Ruth's idea and give her new input. I can hear that the feedback is coming from the heart. Unlike in schools, scholars are not competing but want to see their peers succeed. Giving and receiving feedback has a high importance in the culture of SINA. The members get introduced to non-violent communication as well as active listening. Non-violent communication is a way to express your feelings without judging others. Sitting there in the project presentations and hearing the feedback coming

from the heart I can imagine what an impressive impact on the development of the individuals this might have. Looking back to my own school history I realize that it is pretty hard to receive feedback. Instead, I received a lot of judgment on specific details of my work and behavior, also known as grades. The culture that is lived in SINA provides each individual continuously with a personal feedback.

After a defined time, the timekeeper requests to stop the feedback session. The stage is now open for the next presentation. Robbin walks in front and starts introducing himself and his project.

“I grew up in the village that is secluded and is further away from the grid lines. In my earlier years, I did not know that there existed something called electricity because we at home and everyone else in the village mainly used kerosene lanterns “taboda” and candles for light. In extreme cases, especially when there was no money to buy kerosene or candles we would use grass to light it up, which we also used for playing as we were young and did not care about the consequences of such actions. At a tender age of 12, an incident happened that changed my focus and dreams consequently. At a neighbor’s home, where a good friend of mine lived, it so happened that the mother went to the trading center. She left her child at home; unfortunately, she did not put off the “taboda”. In the middle of her way back, she heard people shouting her name. Immediately she ran home. By the time she reached home the whole house was in flames with her child inside. The two-year-old baby girl was not able to discover at all what life is, she could not discover her potentials because of the “taboda“. The burning grass reached the house, and even the neighbours failed to rescue the baby. A nasty memory that keeps hunting me led me to embark on a journey to bring clean energy to my home and my people. The people in rural communities. I decided to come up with a rural technical center that creates solar home systems that are affordable and durable for the people in rural areas. Because all the solar companies that are within Uganda operate within Kampala, and they do not reach rural areas...”

He is holding up some prototypes of self-built solar systems that bring light and can charge a mobile phone. It is built from recycled electrical components. For the next presentation, he wants to put all the components in a single box, so it will be easier for the people to install it. He receives feedback from his colleagues. The project presentations are continuing. A wide range of ideas are presented. Some are individual projects, but most are group projects. All are on their way to becoming social enterprises that create employment for the team while having a clear positive impact on the environment and the society.

After the presentations are over, some people are staying behind. These are the project mentors. They discuss the presentations and the individual progress and draft strategies how to help the projects grow faster. The incubation system has several levels the project needs to get through. If it has reached the final level, it is ready to go out into the world and get registered as a company or an NGO. Until then, each scholar project is assigned to two project mentors. The mentors guide the scholars according to the best of their knowledge, connect persons from outside to the scholar and do whatever they can imagine building a fertile soil for the project idea to grow. They are trying their best not to judge the idea but to point out challenges and chances of the current interpretation of the idea. From the very beginning of the idea, the scholars are asked to go out of the academy and speak to potential customers to widen and deepen their understanding of their idea. They gain valuable feedback and can see how much potential their idea has.

At this point of the day, I am really exhausted. But when I leave the hut, I see members playing football and volleyball. Although I am really tired, I cannot resist to play a little bit as well because I love this natural interaction between scholars and facilitators. It is a hard contrast to the conformable role the scholars have in the Ugandan school system. In SINA the relation of the facilitator is more comparable to a big brother or sister. A person you are respecting but also a person that you are not afraid to share fears and challenges with.

It is 6 PM and it is getting dark. I am sitting together with some members on the veranda and discussing education, when somebody asks me what education will look like in the future. After a short moment of silence I start. Education is an important aspect of the cultural reproduction of communities. It has to balance the idea of explaining the world and building space for personal development. The education I had experienced in a western country focused mainly on the integration part because the industrial revolution needed specialized workers. But for a raising number of people around the world being an employee in the industry is not a feasible perspective and so our current concepts of education fail. By providing much more space for personal development, compared to the western school system I had experienced, the Social Innovation Academy is trying to regain balance. The experiences I could make in SINA strengthen my feeling that this balance is the key to a sustainable culture. Freedom and responsibility come with the understanding of reality and the ability to question it.

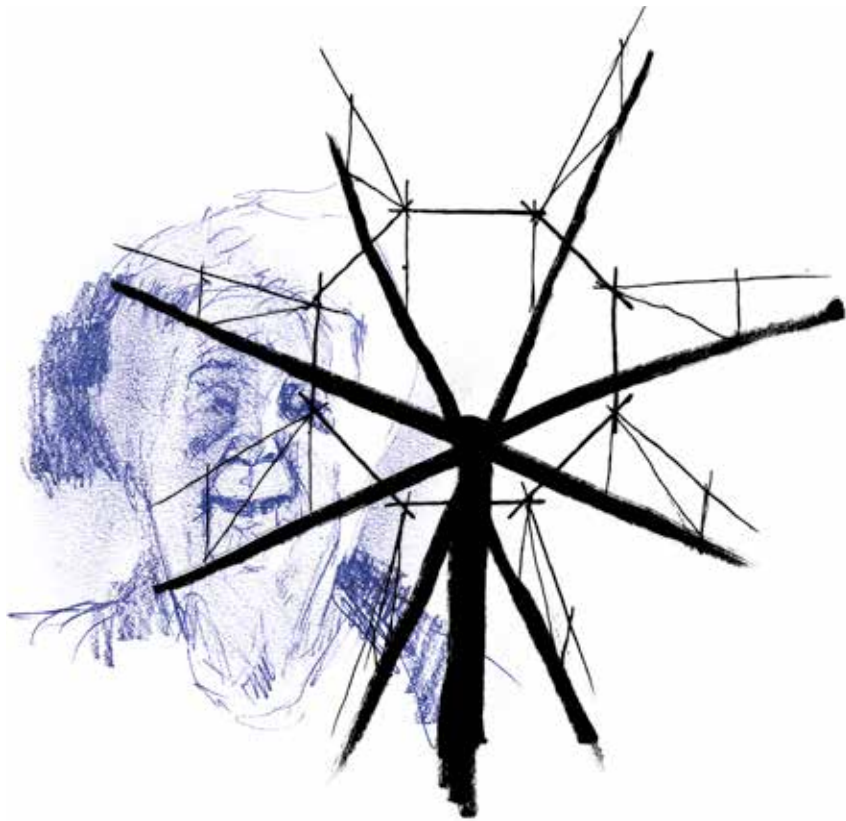
While I am thinking about education the stories from the scholars and their work I have seen today lead my focus to the underlying aspect of learning. Throughout the day I felt that the scholars were building up on their interest and motivation. In SINA I have experienced education as a process of providing spaces for development instead of trying to develop. In this environment learning somehow seems to happen naturally. I have the strong feeling that learning cannot be limited by space, time and intention. Taking this into consideration, education has to be seen as a natural process that happens within a culture.

I am getting sleepy, and so I prepare myself for the night before I lay down under the mosquito net. Moved by the story of Ruth and Robbin thoughts run through my head. I am interested how their journey will continue. Soon, they will leave SINA with their own created employment, with an enterprise tackling a social challenge. They will stay connected with SINA in the idea that there is a lot of potential in everybody that can be unleashed. They

will go out in the world and with everything they are doing they will spread this culture, they will educate. It seems comfortable nowadays to locate education in school buildings, although it is an integral part of our culture. Before I finally close my eyes at night, I remember Miiró's words from the early morning that a shortcut is not always the best way.

“School, as we know it today, to learning is as brothel is to love”.

Philipp Mäntele



INTERVIEW WITH THEREZITA PAGANI

By Tathyana and Philippe

Could you tell us a little about your life trajectory?

On August 22, 1931, under the shade of a leafy mango tree in Colatina, in the north of Espírito Santo State, by the murmur of the muddy waters of the River Doce which ran through the backyard, a young 20-year-old mother, was giving birth to her second daughter. As soon as I was cleaned up and given back to my mother by the young midwife from Rio de Janeiro, she said: “This child will not walk or talk because she was born with neurological problems.”

Fortunately, my grandmother Tetê was close by, and with the experience of having given birth 19 times she took me with all her affection and firmness and took care of me during my first days because I was not able to take in my mother’s breast full of milk. This is why Grandma Tetê fed me crushed manioc flour biscuit and boiled cold water, through a bundle of cloth shaped like breasts. I had several milk-siblings who, even years later, would ask for my mother’s blessing whenever we’d meet, in the act of respect and gratitude.

I was the first granddaughter to be given my maternal grandmother’s name, Thereza with an “h” and “z.” However, it was given to me on the condition of being nicknamed “Therezita.” Therezita was a Spanish dancer who had charmed everyone in the city of Colatina-ES.

The Vitoria-Minas railroad went through the city. The railway's first agent was my Grandpa Adalberto, who was skilled in Morse Code. He and the family left their bankrupt estate in Campos, in the State of Rio de Janeiro, to live in a small house owned by the railway station. No one ever talked about why this happened. However, my grandmother, a strong, loving, cheerful and charitable woman, made sure her children were educated, thus creating independent men and women who worked with what they liked. Adalberto died in Rio de Janeiro, and I knew he loved to read, and one of his readings was Jules Verne. I heard this from my dear and playful cousin Lúcio Correa de Castro Soares, who also loved books. He was the son of my mother's older brother, Uncle Arthur and Aunt Marieta. She was my role model by her boots and Carioca clothing, and the fact that she spoke French with my mother, with the typical Rio accent of "sss." My brother Beto and me always expected the visit of this cousin of ours, during summer vacation, because he'd spend it at Grandma's house in Colatina-ES.

My mother said that my baptism was in the little church of Colatina Velha, and my Godmother was her older sister Agnalda (my Aunt Petita), and my godfather, her younger brother Uncle Anchises, was a pharmacist trained in Rio de Janeiro, who was also someone who alerted my mother about my alphabetical deficiency at the age of 7 (I will get to that subject later).

At 6 months of age or so, we were in a small town near Afonso Claudio; which had hot springs that could treat Beto's airways. Daddy only came to spend the weekend and leave the money for the bills. I was on my mother's lap at the table, and she was distracted by the thoughts of solitude and responsibilities and did not realize that I, being quick with my arms and hands, had taken a bill of money and put it in my mouth. Mom only woke up from the lethargy when she heard the sound of my tongue and the different click of my babbling and noticed the money was missing from the table. Frightened, she ran her finger in my mouth and withdrew, no longer the note, but the worthless veil of the bill. In a matter of hours, I had contracted an

infectious amoeba that caused my trip to Rio de Janeiro, to see Doctor Vitrock, a famous doctor at the time. I was in a coma for a few days, but being feisty, I woke up from it for the first time, and had to follow a special diet until the age of 7, which consisted of milk, black beans, toasted bread and manioc flour biscuit, a "supplement" that once again accompanied me.

My early childhood was spent with Grandma Tetê, who was a true mother to me, but I never lived with her, although I spent most of the day at her house. I got the nickname "Cabrita Branca" because I did not walk, as I was told, I just ran all over the place and was curious about everything, with no notion of danger.

My father, even without knowing that his second child would be a girl, imported from Germany a half-tail Schudmayer piano; a sturdy piano manufactured in Stuttgart. And when I was 3 years old, I started studying with Ms. Mercedes Resende, Grandma's neighbor. Today I realize that it was of utmost importance that my literacy happened first through music. At the age of five, I did my first solo recital accompanied by the violinist Frei Miguel, auxiliary of the Mother Church. The concert was in the club that Uncle Antoninho Pagani, my father's older brother, built in Colatina-ES.

I played serials by Schubert and Toselli, written for children. I didn't make mistakes, and I was not shy. I just don't remember how I sat on and then got off the bench of the piano "moche," which was high. I wore a beautiful dress, all embroidered and pleated with lace making waves, among small daisies of yellow Rococo centers; my hair full of curls like Shirley Temple, which I liked to imitate – never managed the tap dancing, though.

Inaccessible places and everything that was difficult stimulated me, while the easy bored me. As Paul Valéry put it, "I do not want what is in sight!" I always wanted to discover the invisible, the reasons behind. And with that, I always felt that life was simple.

Grandma had bought a Singer sewing machine to make Mom's trousseau, and she continued to make robes, bedding, and also my beautiful Chita dresses for each day of the reissue: red, blue, and

yellow with many frills. These were the days when I was leaving the lacy white dresses, whose pieces were always stuck on the barbed-wire fence, the guava trees, and the cashew trees that nudged them. The laundresses said that the spots would only come out the next year! Not to mention the always injured knees, which made it difficult to sleep, because neither the sheet nor the nightgown could touch the knee; otherwise, it was painful.

About that sewing machine. I learned to sew seated on grandma's lap: she would do the pedaling and I would drive the fabric. I learned to fill a reel, and I broke a lot of needles on my fingers because I'd forget to move my hand out of the way. Grandma, always quiet and patient, would let me cry it out, then she'd take out the broken piece of the needle, put on some iodine on my wound and say: whatever stings, heals and whatever tightens, holds safely.

Grandma always liked to know of our dreams to be able to play a local gambling game, and then "fund" our afternoon popsicles. Yummy flavors of berry, lemon, coconut and gingerbread (made from fermented pineapple peel). She also liked to buy lollipops from a boy who always walked by selling them, singing: "who wants lollipops? They were wrapped in paper, and stuck on a stick."

Often it was time for the soldiers to take the drunks to jail. Most of them could not walk, tripped, and were picked up again. Grandma would call me to help out, and give me cotton pads soaked in ammonia so I could put them in their noses to wake them up. So the soldiers already knew me, and they never harmed me.

As a child, I would do all the classic things, like playing "Hide and Seek", marbles, standing on a seesaw, playing on a rowing machine, skipping, riding a scooter, and keeping my balance on the railroad tracks. Every Friday, I helped to do the roll and the bundle of clothes that the daughter of the washerwoman, a "downs syndrome" girl, carried with such balance, I envied her for it. I never managed to do it so well! She'd also carry the ironing board with the ironed clothes on her head, along with a pressed dress and suit in her hands, without letting them drag on the floor. I could not understand why I couldn't do the same.

Another thing was to go for a playdate at the blind girl's house, who ate sitting on the floor with her siblings in the yard. An empty, clean can of guava sweet was used as a dish, and there was no cutlery, we all ate with our hands. The chickens and chicks that were around did not try to eat or peck their food, but they'd devour mine and I was always left hungry. The kids would laugh and tell me to scold them.

I loved to visit the house of the telephone operator who had a deaf-mute daughter. She'd mimic my great gardener friend, Mudinho. She'd let me talk to the pansies in her garden, and ask each one why they were angry, why they were sad, and why they were laughing and happy. I'd also ask the violets why they hid so much under the leaves. But my favorite was the sunflower, always in motion in search of the Sun. Mudinho would give me necklaces made of flowers whose names I cannot recall. They were made by hooking one flower to the other. I cried a lot when he died because he was struck by an angry ox's horns, amid the cattle that was passing by in the city.

Meeting gypsies was another joy when they camped near the garden. The music, the dancing, the decoration on the pots, the fire, the smell of the food made me unafraid that they would rob me. I liked to climb, and play around the logs that were taken by train to Vitória-ES. The smell of these hardwoods involved me, and all the lumbermen knew me. And so I played without danger. I was also fascinated when, on the way to my piano lesson, I'd hear the sounds of the blacksmith's work in the forge, the anvil, the fire, making of tools like a hoes, sickles, rakes and axes.

One fine day, I won my first girl's bike. I quickly learned to ride it, but I didn't know how to brake. One day I went down the slope of my street, and I narrowly escaped dying because of Manoel Caolho, who worked in my father's warehouse – and later invited me to be Godmother to his child – foreseeing the tragedy, he opened his arms and legs, and held me. All three of us felt safe and sound: me, him and the bike – in the exact moment in which a train was passing exactly where I would be headed, had it not been for Manoel Caolho. Speaking of death, about the same year, playing house with my Grandma's

neighbor, we built a cave near a precipice, and there we'd pretend to cook and took care of our "children" which were actually cloth dolls.

I went to pick some vegetables in the garden for the salad, and when I returned, the ravine house had buried my friend. I ran and screamed for help and, what was not a surprise: she was taken dead. I went to the funeral home to bring flowers picked from Grandma's garden, and people said that I had been born again, given a second chance.

Beto, my brother, liked to take me to the backyard hill that led to another street. It was very steep. Once he took a tire, made me get inside and said, "hold on!" Then he let the tire roll downhill, and I ended up falling into the rusty arches of some barrels, from where I came out screaming and bloody. Grandma healed me and said, "it's just how boys play."

Birthday celebrations were prepared months in advance, with everything done at home, and the whole town was invited. Just like the First Communion party, which always happened on the last day of the Catholic Missions. We were prepared by a missionary priest, and he would say: "Jesus enters the heart of the poorest, wearing clean clothes, clean sneakers, and Jesus is happier."

As I left Sunday School talking to a poor girl, I asked her if she wanted to swap dresses, veils, and shoes with me. She was happy, and I was even happier. In the afternoon she came to my house with her clothes on the hanger and white sneakers, and my mother soon asked if she wanted to get dressed there, and I quickly replied, "No" I exchanged my outfit for hers, telling Mom what the priest had said during Sunday School. Mom took me to Grandma's house and said, "I'm going to make a dress that looks like yours and the shoes will be the same." She took the measurements and sewed all night. The dress was beautiful, and I loved Grandma more and more.

At 4 to 5 years old, Mother was painting a "front," an altar towel for the festivity of May 8, which was Beto's birthday, and the coronation of Our Lady. I was always near hoping to help. As soon as Mother went to meet a friend, I took over the painting and added my daisies. When she came back, I was still painting. She was furious, so

took me out of there shouting in anger and giving me several bruises that hurt a lot. As a consequence, I became scared and afraid of painting. After years without drawing or painting ever again, I met Mère Sebastiana, the harpist and drawing teacher in Sion, who suffered from deforming rheumatism. She took away my fear and made me fall in love with drawing with a feather tip and also watercolor painting. She taught me to embroider in gold and embroidery to the tint and on the foot frame (o bordado à matiz e no bastidor de pé) - which I donated. She also taught me still-life painting of cravinas, glass, and other things. Because of the cravinas, I was chosen by the Petrópolis Stamping and Fabric Factory, and I have clothes made with that print in raw cotton.

Going back to when I was 3, I experienced yet another accident, and this time the coma was very long. Always on Sundays, after the Mass at 6 or 7 o'clock, we would drive outside Colatina-ES, on the edge of the Rio Pancas, so that Dad could catch fish, which Mother would clean and prepare while showing us how she did it. She would take large leaves and wrap the fish, while Beto and I would make holes in the firm sand and search for dry leaves and twigs so that Mom could make the fire until the sand was glazed. Then the fish were put to roast, covered with dry sand. The towel for "convescote," according to Daddy, could not be missing either. The plates were made of leaves, and our fingers served as cutlery. Our hands served as glasses to hold the crystal clear water of the Pancas River. The only homemade item that we'd bring along was Italian bread. Mom and Dad drank Portuguese wine, and sometimes black beer in a blue or white agate mug. Dessert was fruit harvested from the woods: passion fruit, pitanga, jabuaba, coquinho sapucaia and everything that wasn't poisonous.

After eating, it was time to rest, but I'd always go after the butterflies, which flew in profusion, to my amazement. Sometimes the large blue butterfly would appear and come dancing around me before flying back into the woods. As I was telling you, on a fateful Sunday, there was a runover. Before we reached the riverbank, Mom

held me by the hand, Beto beside her and Daddy maneuvering with the Ford mustache (as it was known back then). Before finishing the maneuver, Mom let go of my hand, my dad didn't see it and kept moving the car. Fortunately, a tree stump that was nearby protected me, pressing the wheel and my body. I was removed unconscious, according to my mother's report, and taken to Grandma's house, who only left me when I grumbled. A few days later I woke up from the coma and *Cabrita Branca's* mischievousness was back, to the relief of the family. At Te-Arte, I welcomed a boy who was run over on the sidewalk and had his legs plastered.

When my father saw him, he asked what had happened, and the boy said that he was run over by the sidewalk along with his father and brother. The brother died, but he was only badly hurt, and that was Christmas day in Juiz de Fora. My father said: "Same as the day I ran over you." And he was very overwhelmed.

Once my father hunted a white heron. My mother was able to stuff the heron's wings and make them angel wings for me to wear at religious festivals. Invited to one of these parties, already dressed as an angel, I went to test the wings. There was a part of the sidewalk in front of my house that was more than a meter higher than the street level. I ran out and jumped, trying to fly, only to fall flat on the ground. My dress was all bloody and my face, skinned. Fortunately, my grandmother had a spare dress. So that night I was a skinned-faced angel.

Another research of mine, of that time, was in the first house built by my father, in which there was a waterfall passing through the yard. And then my dad had a barbed wire fence done. I went to the waterfall to pick some flowers called "onze-horas." I stepped over some mud and slipped. Luckily the Angels helped me, and I did not get caught in the barbed wires, not was I bitten by the neighbor's dog.

At age six I began to take crocheting classes to make the baby trousseau for Lélia, my soon to be born little sister and goddaughter. She would be born in August and with black hair. In order to make that happen, I began going to mass every day at 6 in the morning. The vicar went to my house to ask my mother why I was doing that,

and she told him that I wanted a different, black-haired sister, and she wanted her to be born in August, which would be impossible according to the doctors. And can you believe that, with some faith, she was actually born on August 1st, and with black hair!? The crocheted trousseau was ready and beautiful, without a single ribbon or pompom missing in the little hats and shoes of various sizes. The godparents were Beto and me.

At age seven I started 1st grade at the Cristo Rei College, brought to Colatina by its own families, and the Pagani family also collaborated a lot. Unfortunately, I was a student of these nuns, however without any previous religious preparation, let alone pedagogical, so I received the mark of being "dumb" by the nun who taught the first grade. My mother arranged a meeting with the principal and the teacher. And imagine my mother's astonishment when she heard the teacher say: "You should be glad – very glad – for being rich, and just accept that you have a dumb daughter with difficulty in learning to read and write." My mother showed her my previous report cards, with grades of nine out of 10, and ten ribbons of honor that I had received. The school Principal could not explain it and the meeting was interrupted.

The word "dumb" kept throbbing in my head until I was 12 years old. Then I received extra tutoring with a teacher from the school group, with whom I identified and learned to read and do the four mathematical operations.

I also had a lot of help from Anita in my literacy (she had a lot of patience), an employee who I had asked my mother at age three to let work at our home. At ninety-six, Anita died in my apartment in the city of São Paulo. Anita has always been very dear to me, dearer than any blood relative.

Mrs. Clotildes Paiva was the teacher who helped me with the admission examination for middle school, in the capital of Vitória, ES, which I passed with honors, and got into the Do Carmo College, where previously my mother and my aunts had attended elementary school. I waited for the Great War to end, and then went to Sion College in Petrópolis, RJ, to fulfill my dream of speaking French like

Aunt Marieta and Mom, even though I knew would have to repeat that entire grade, and would not be able to spend my June holidays at home, because they only lasted a fortnight and it was an expensive journey. Even so, I felt fulfilled.

Notre Mère Maria José (Superior) was the person who helped me the most by raising my self-esteem. Later on, I finished middle school and went to Rio de Janeiro, RJ, to study high-school (classic and scientific) at the National Institute of Music, in the Santos Anjos College, high in Tijuca. At the time I had experienced months living in Aunt Scholastica's ("Santinha") house; I could not stand it.

I managed to then live in the Santos Anjos College, studying, going to the Institute, attending classes at the Municipal and helping children from the Salgueiro favela.

It was the last year of my piano and Classical studies, when in June, during the holidays, I met a sanitarian engineer with whom I sympathized and later on dated, but who would go to live in Kenya because of his work. My mother gave me all the support I needed, but my father did not.

By August, I was about to turn eighteen and get engaged. Mama was then forty years old and expecting her thirteenth child; And Dad was forty-one. Dad would not let me go to Colatina, ES for my birthday and engagement. Mom and I always had a frank dialogue and lots of reading. In Te-Arte's study groups we keep this frank dialogue and many readings of current pedagogical books. We are currently debating the books of Professor Mario Sergio Cortella.

Doctor Ciro de Almeida, a professor of philosophy, captivated me and prepared me for the university entrance exam. Finishing the National Institute of Music, the plan was for me to live in Rio de Janeiro, RJ, in the apartment in Grajaú, and take care of Adalberto, José (Zezito) and Lélia.

Unfortunately, in October, Mother died of childbirth complications, as did her son. My plans and dreams ended up being set aside to take on the inheritance of taking care of my siblings, since Dad did not want to remarry, and I was not yet ready to move to Kenya.

With that, I ended up staying in Colatina, RJ, teaching piano until the Marist College was finally built and opened. It was brought by the father, so that the other four children could study in Colatina, ES. As for the girls Lélia, Zélia, Margarida and Maria Isabel, Papa agreed that they continue studying away from home, in Sion. When Lelia finished university, Papa asked her to take over the house in Colatina, ES. So I came to São Paulo, SP, to do the Montessori course, with a scholarship offered by Sion.

I went back to vacation, and there had been a misunderstanding between Papa and Lélia, and she lived in Victoria, but he forbade me to go back to São Paulo and said no one was going to study anymore. My shock was so great in that situation that I developed somatic tuberculosis with hemoptysis. I returned to São Paulo, where I was treated by Dr. Naeron Trenches' medical staff at the Santa Casa Hospital. He's the father of Maria Alice, a Montessori classmate. And by becoming acquainted to with her mother, Mrs. Maria José Trenche, a Portuguese teacher from Caetano de Campos, where I did my internships – I was able to get to know her vast psychoanalytical library, with authors like Noemi Silveira, Virginia Bicudo, Miler de Paiva, Nelson Pocci, Luiz Adalberto Pi, Toreiras, of the Toreiras Clinic in Rio de Janeiro, RJ.

I met Doctor Henrique Rocho, with my father, for the treatment of my brother Zezito. And he said to my father: "This is a teenager thing, and it's not a disease. But my father did not believe it. He made him go to the Toreiras psychiatric hospital in Laranjeiras, RJ. I helped in the hospital with my brother Zezito and was invited to be part of the modern treatment. At the time I did not want to participate, but I was interested in studying children, family and to know myself more deeply and not develop somatic symptoms⁶³.

Returning to São Paulo, SP, I looked up Nelson Pocci, as advised by the Toreiras Clinic, I took part in an analytical group and I met Maria Célia Amado Calmon, with whom I worked in the art workshop with children and adolescents, with stamping and ceramics. I also met Mister Margarete Guil, who I presented with pieces of

burracos with a migrant family and for the owner of Mestre Ju, the crouched Boucher.

I left Maria Célia and went to work in Pró-Arte Brasil, with Gilber- to Tinette, in Sergipe, SP, where I met Teodoro Rambergue, owner of Casa & Jardim and Pró-Arte Brazil; I also met Helena Silveira and took a course of Orfe Cordalle Metalofone in Teresópolis, RJ, by Pró-Arte, with Professor Hélder Parente. Also in Teresópolis, I met the great and unforgettable Koellreutter, with all the enthusiasm to transmit the new music and latest creation. Teca Alencar de Brito, one of the disciples of Koellreutter, was my collaborator with the children in Pró-Arte Brazil. Koellreutter was one of the pioneers in introducing the interdisciplinary and complex thinking of Morin, Varela, Maturana and Bateson.

I was invited to take a *Lato Sensu* course, with the systemic family theme, with Ada Pellegrini Lemos, at PUC-SP, along with which I supervised work and family cases until the present day.

At FAAP, I followed a xylograph course on Saturdays, and Parapsychology with Father Quevedo. With the Nomura family, I was invited to take a mental control course, and I met Frei Hugolino Back, a paranormal who helped me a lot and taught me the technique of laying hands, at Caldas da Imperatriz, in Santo Amaro, in the Conventinho do Espírito Santo. The first course of Tai-Chi-Chuan, in Liberdade, SP, also with the Nomura family, given by Japanese master. I learned how to work on the loom with Professor Arostegue, and to this day I do it very well.

The Living Body course, with Maria Duchenes, and the Laban method, that allows me to this day to help children play with simple and natural movements. I took the Romain's course with Simone Romain.

Already working in Pró-Arte Brazil, São Paulo, I met Carmella and Marcelo Niteh. We spent Sunday mornings in Ibirapuera Park, painting, modeling, singing and playing with the children while the parents went for walks. At noon they'd pick up the children again. Later on, the city council decided to take over the activity.

I started to go to the Pró-Arte and Municilap concerts on Sundays. At that time, Te-Arte was recently opened in the neighborhood of Pacaembu. Some years later, there was a disagreement between me and two other members of Te-Arte (Ediva and Maria Isabel), and the partnership was broken. To proceed with Te-Arte, I was assisted by a lawyer, and then, with the profit sharing, I bought a farmhouse in Estação de Pereiras, where I started to take in families with children. It was a very enriching lesson for me, different from the period when I was working with renting listed farmhouses and making trips to Coroa Vermelha, Bahia, Espirito Santo, Nova Almeida, Praia do Canto, Goiabeira, where I was renting a house and spending holidays with children whose parents would visit, and we'd meet up by surprise in the plane.

We bought many primitive musical instruments, tin toys, cars, and clay pots, and we attended the Camp of the Sun, taking families and children to meet the Indians and many folk festivals and learning how to weave with the body.

Throughout the year we performed dances with Raquel Trindade in Vento Forte and Tião Carvalho (who I affectionately nicknamed Shooting Star), who helped us with genuine Afro-Brazilian knowledge with the charisma of a master, composer, and playwright, whom the children loved. They participated in Morro do Querosene, a neighborhood in the city of São Paulo, in the Boi do Maranhão (Ox of Maranhao) festivity, and I had the honor of being the "godmother" of the Ox, an experience that reminded me of my childhood in Colatina, ES, following and running after the Burro, and the Ox and offering liquor, cake and coffee at Grandma Tetê's house.

My great joy was to win as a gift the cavaquinho that accompanied the festivities. I'm so proud of having a loutier restore it. I received a good offer for the age and stamp on the instrument, but I left it for Te-Arte, as well as the drums of hollow logs, cuicas, reco-recos with cavas, castanets, fiddles rattles, and other instruments.

Being in touch with Paulo Dias and his research is good for my soul, as is Rolando Boldrin's program, the Inezita Barroso program,

who unfortunately physically left us this year. The Revelando São Paulo, although now much more distant and having a greater mixture of current arts and cuisine, still gives me joyful memories of our Brazil, indigenous, colonial, immigrant and with its rituals.

In television communication, knowing how to search, I find good programs, but I still prefer reading the good thinkers. I am currently interested in books on general and professional ethics, such as “Why philosophy?“, “Ready to go?” and Legal and Philosophical Reflections on Death,” by José Renato Nalini. Also the books by Professor Cortella and Marcos Ferreira Santos. Just as when I arrived in São Paulo, I was appointed by Dr. Nelson Pocci to read the books: “Homo Ludens Filosofia”, by Johan Huizinga, from the publisher Perspectiva; And the “Poetics of Space,” by Gaston Bachelard, editor Martins Fontes; And the collection of Françoise Dolto, published by Martins Fontes, translated today.

Daily practice with children and families makes me more eager to continue getting to know myself better and making myself understood by the children who are faster, sincerer and not corrupted by the hypocrisy of adults. A good remedy for me is what the artist Reinaldo Domingues launched in his work of art “Black and Red Labels: Good Sense, 700 mg, adult and pediatric use without a prescription” (black and red labels for medicines in Brazil are what we classify as POM in English); I also highlight The Money Boy – Financial Education (www.regerarte.com.br). Among recent readings, I share the ideas of the Portuguese professor Carlos Neto, from the Faculty of Human Motricity (FHM) in Lisbon. I was also very impressed with the chapter “Educational paths and stumbles,” from the journalist Miriam Leitão’s book, “History of the Future – Brazil’s Horizon in the 21st Century.”

I do not want to be unfair about all my learning, reading and participation in seminars from our great Brazilians whose legacy has enabled real changes in schools. We need to be imbued with this collection and adding to the new techniques without, however, forgetting our body, exercising as we need as human beings, having a healthy diet, without much salt, sugar, and soda, but vegetables, veg-

etables, grains, fruits; water, and bedtime and rest, but also a lot of play and music, without schedules to exhaust the child.

Parents should be attentive to their children’s speech and feelings about how they feel towards the environment they attend and whether the proposal of such environment and teaching is truthful.

When you ask me about my life trajectory, I cannot forget the most important milestones in my life, for it was through my history, my diagnosis, my difficulties and my experience that I realized the importance of a reliable family, in its pillars, for a child’s good education.

I learned by living, I learned by experimenting, helping, seeking, studying and discovering. And for some years now, the children who have passed through me have also been able to learn through research, exploration, and collaboration. With all my experienced self, I try not to repeat the same dismal and harmful attitudes that cut, temporarily or permanently, a child’s creativity and playfulness. Limits should be imposed, but in Mom’s words, with “calm and patience,” and not with physical aggression.

In order to meet the principles of transversality and playfulness in Te-Arte, I believe that they can only occur through the experienced self of each child, a curriculum that was lived physically and later studied academically, questioned, debated and experimented with children who share a space together, amid nature and other children of different ages and ethnicities.

In my family, I have lived with four generations of brothers and sisters, and each generation has followed the social, educational, scientific, industrial and economic changes and advances in communication with the telephone, radio, television, newspapers, magazines. Women reinventing and demanding to vote, new projects and hard studying, but without, however, outsourcing the upbringing of their children, as we are experiencing today, although the maids were in enough numbers to enable mothers to play other roles. Fortunately, I was born into a family in which my parents were educated, liked to read, liked to be artistically connected with music, museums, travel, literature, cooking, fashion and others.

Finally, in this trajectory of 84 years of life, completed on August 22, 2015, health began with a whirl in the kitchen in January of this year. I had a beautiful fall, which scared me a lot since I was on vacation and had given Elizabeta (Beti) a few days off. She's my best help, and she's been with me for 18 years. The day I fell, she decided to visit me... she's an intuitive person. She and I make a good pair! She helped me with the fall and ended up spending the week here at my home etc. Luckily my neurologist came back from a trip and helped me. I returned to Te-Arte normally, working from 7:30 a.m. to 12:30 p.m. with many interviews and supervision every fortnight.

I like to travel. I enjoyed the Carnival this year in Dourado, SP, with my younger sister, in a farm hotel with plenty of room to walk and get our muscles moving a little. These were days of bodily, social, mental and spiritual healing. I took very good books that helped me a lot to prepare meetings for employees and parents. I started a course in April, at night. It's about death, a subject that has instigated me.

In 2014, I went several times to the Midwest, and I walked through Goiânia, Goiás Velho, Chapada dos Veadeiros, Araguaia, Brasília. I travel with a family that I truly love. Aldo, Luana, Mariá, Maia. We go by plane, by car, by boat, by canoe. Life with nature and simplicity allow me to love more and more the true learning about Brazil, with its human and geographical diversity. I remember hearing my mother say: "Traveling is worth more than schools that only make you memorize content, and don't teach you the experience of differences."

Still, in 2014 I went with the same family to Ouro Preto, Mariana, and surroundings. We stayed in an inn that reminded me of what I went through after my mother's death with my father's inadequate attitude towards me because the same thing happened to Sinhá Olimpia, who gave the name of the inn we stayed in. I was sad to read about her story, but at the same time happy she did not succumb, but rather sublimated to educating youngsters from zero to 7 years old, an age in which I believe in human beings, caring, listening, respected, desired, not having one's upbringing outsourced and playful.

This will be the creative, respectful, ethical human. Because it is from the inside out that the child learns about their emotions: crying, angry, scared, sad, joyful, hating, pouting, having limits, so they don't get into chaos. Learning to like yourself, knowing your body, your limitations and learning to overcome them, to look in the eye, not to wallow in frustrations and always learn to deal with the natural elements: earth, water, air, fire and with plants and animals.

In 2013, I went with Renata to Bahia, in Feira de Santana, to collaborate and help plant the seeds with Lara Queiroz, who was setting up a school similar to Te-Arte. From there I went to Brasília to meet Fernanda Figueiredo for the film exhibit "Seeds from our backyard" (a documentary about Fernanda's Te-Arte, which I'll talk about later), followed by debates with the crowded audience. It was part of the schedule for the CONANE (National Conference for Alternatives in Education), to which we were invited and keynote speakers. Elni Willms, who had defended the doctoral thesis "Escribivendo" at USP, gifted us with her presence telling us a little about what led her to opt in her dissertation for Te-Arte and Guimarães Rosa.

In 2012, Henrique Schuman, who owns an inn in Gamboa, Santa Catarina, invited me for the week with several masters and naturalists, to discuss the film "Seeds from our backyard" with Fernanda and the state public network. The topics in our gathering were very, very broad. Subjects such as sustainability, eurythmy, agriculture, yoga and organic mandala. It was great.

Brazilians are very generous and always learn a lot with craftsmen, museums, regional cuisine, and folklore.

I have been touched by Fernanda's courage and, at the same time, by feeling that seeds are being sown in the universe, for children who are citizens and playful beings from 8 months to 7 years old, from 8 a.m. to 12 p.m. I was also with Fernanda in Cuiabá, MT, in Maceió, AL, in the south of the country and in Atibaia, SP.

You tracked the childhood of many children of different generations, how do you see the new generation?

With that I have the possibility to work and value the team with playful content, keeping current ethical values, taking advantage of all the new techniques, fast as I see it. I think they are excessively changeable, sometimes cannot be deepened or understood. Children and teenagers, each year that passes, are labeled hyperactive, having attention-deficit disorder, medicated and recommended to behavioral therapy. Then I ask myself: these children, from what age do they attend nurseries? At what times do they interact with their family? Who looks them in the eyes? Who listens to them and talks to them? Who keeps them company?

Mothers working in big companies are earning more than fathers and thus are raising children without maternal affective bonds. On the other hand, fathers are getting lost and stressed by taking responsibility without support. Often they are publicly humiliated by these mothers, who have them change diapers, preparing baby bottles, playing, putting children to sleep and other things. In these cases, tension means uncertainty and creates, in my view, a feeling that children intuitively notice and then they pay back by rejecting them. I also asked my current collaborators to answer this question:

Eduardo – Children are in a hurry (the world itself is), toys are usually linked to technology forgetting the basics and the essentials. Learning is more linked to getting information than to living. And people consume all this like a hungry lion; people buy without knowing why or for what. It is the endless pursuit of having.

Adriana – I believe that the children continue the same, hence the denomination of universal child. They are by nature very intelligent and rich in capacities, sensations, perceptions and feelings. But the new generations are unfortunately going through not very positive changes due to what happens around the world regarding acceleration, lack of human contact, lack of harmony with nature, extreme focus on money and material value of everything, automation, and sedentarism. Hence the play, with simple toys, crafted and not fabricated, made of materials from nature, are increasingly rare. Nowadays, parents come and care less and less about their children,

and family relationships are getting shallow. Technology, unfortunately, is increasingly present in the lives of children and adults often stimulate this situation, not realizing how much it harms their development, brings them damage, including neurological.

On the other hand, learning is increasingly systematized, and children are required to achieve results regardless of their learning process, their ability, and rhythm, their chronological and maturational age, which varies from child to child. This is all a disrespect to childhood, children are not seen as human beings, but as productive and manageable beings at the mercy of human greed.

Tania – I am currently in the third generation. I observe that nothing has changed in children, their needs, curiosities, their interests for playing and expressing are the same. But what has changed significantly were the expectations of the parents regarding the learning of the children. And society demands more and more of the children a competitive attitude, concerned with informational development, in search of a better future material use. Introducing them in a load of didactic and technological activities, leaving these children more and more stressed and introspective, living in contact with social networks, the internet, etc. Leaving family and collective relations in the background.

Josiane (Jô) – Children and adolescents are living in a society of the “First me,” “I can,” “I want,” “if someone has, I also need to have.” They hardly ask themselves “do I really need this?”, “Can I have it?” Recycle, reuse, transform; all this is only learned if the child lives within environments that do this on a daily basis. It is not enough to have the scrap toy day, or the batteries or oil collecting day!

Tábata – I see the new generation more distant from the simple and closer to the technological. Today the children recreate the games bringing current characteristics of the reality in which they live; they demand that the stories they are told follow exactly what is written and that, by the way, they already know by heart from the several times the media has already repeated them. They want for pre-built, modern toys, full of light and sounds. They are less interested in creating and re-creating. They imagine little, and they copy very much the

models imposed by advertisements. They are in a hurry to know how to read and write; they know a lot about commercials and everything presented in them: books, toys, movies, hotels, games, video games, cell phones, tablets, TVs and their latest releases. They master the technological world and are seen by parents as future entrepreneurs, they are raised with the intention that they become successful professionals with excellent positions and earnings.

Renata – Right in of 2015 children are being attacked by technology very aggressively, which is impairing their vision, hearing, their joints, their mind, their physical body, creating an addiction with no return. Toys are cellphones, iPhone, iPad, tablets, notebooks, computers, remote controlled toys, dolls that talk, walk, sing, cry and are shaped in a terribly thin and “siliconized” model. There still are fast food; shopping malls open seven days a week, parents working Monday through Friday that on weekends fill the kids with treats and toys to lessen the guilt of having outsourced the child to nannies, grandparents, school and friends. Girls turning into eroticized adults with makeup, high heels, nail polish, skin cleansing, hair treatment and glamorous events, highlighting the one who shines the most. Boys becoming adults ahead of time, being encouraged to fight and win when needed. Parents projecting on children what they once wanted to be, thus not allowing the child to be authentic and able to cope with frustrations. In this way, children are being raised with no rules, they do tantrums, they kick and scream and get whatever they want, and adults, who also want to enjoy technology, have no patience and end up giving in. I believe in some factors that contribute to this.

Angelique - The new generation is getting closer and closer to the technology available today. Children are exposed to computers at a younger age. And it seems that people, in general, are getting the false notion that the computer or internet rhythm, the rhythm of life. In my opinion, the speed with which certain changes happen seems to be the parameter for changes, of other nature to happen. Our internal maturation (whether psychological or emotional), for example, has a rhythm, a speed that is totally different from the speed of the Internet.

The virtual world, so to speak, is not the world we live in. I get the impression that we needed a little more ‘substance’ and less appearance.

Besides, something also related to technology and the Internet... I feel that we all have to be careful not to confuse hoarding of information with knowledge, let alone with wisdom. Since today we can have very easy access to the most varied information, we run the risk of finding that knowing things is easy and fast, a trend that seems very strong among today’s children. But I think it’s important to look closely at information. Perhaps an example of skill learned to illustrate the point: if we know, just for information, exactly what we need to do to drive a car, do we know how to drive? Apart from the question called practice, there are even more subtle aspects. Does a computer that composes a musical piece have knowledge? Is that a piece of art? Or is it what the programmer took into account to make his choices when programming? It seems to me that there are important aspects that can involve values and beliefs. What I am trying to say is: I think what Therezita calls the ‘lived body’ is very important. It is the life of everyone, no one told, the person lived! It is something related to being present, something that stretches beyond words. I would say that, in general, the differences presented today by children in what relates to toys, technology, consumption and relationship with parents, has much more to do with appearance than with essence. I believe that as human beings we are, our issues are the same. Regarding children, I have the impression that is paramount to receive true attention, directly linked to affection and boundaries.

If in the future what we call school becomes an institution very different from the one we know today, what would be the cornerstones that would need to be preserved for future generations?

The school needs to be human, to respect, with good sense, the child. This child must be desired from conception, not seen as one more thing, outsourcing it, taking them to nurseries since they are three months old, to be looked after by people who mostly do not

have instruction and knowledge of the fundamental stages of the mental, physical and transcendental development of the child.

On the other hand, the parents are more eager for consumerism and full of guilt, pampering the children, forgetting the most important which is affection, the look in the eye, the sharing of parents in the ambience of home. And not neglected in exchange of increasingly fast, sophisticated and attractive electronics. These gadgets are global and report wars, corruption, the wastes and the estrangement of the man from himself and his fellow man. The bond does not exist, and when it exists, it is selfish. And without bond and affection human beings are not built.

I am not against machines and modernity, but I feel that there are no more limits, and basic principles of citizenship are being disrupted.

Nostalgic? Old fashioned? Backwards? No! The school must educate for citizenship and the greater possibility is to escape from homogeneity and head to the difference of age, gender, races, knowledge, physical spaces, plants, animals, music, paths, several ever changing spaces, seeming disorder to work the outside and the inside, the look with an eye to find. As says the picture that today hangs in Te-Arte's carpentry shop: "God bless this mess."

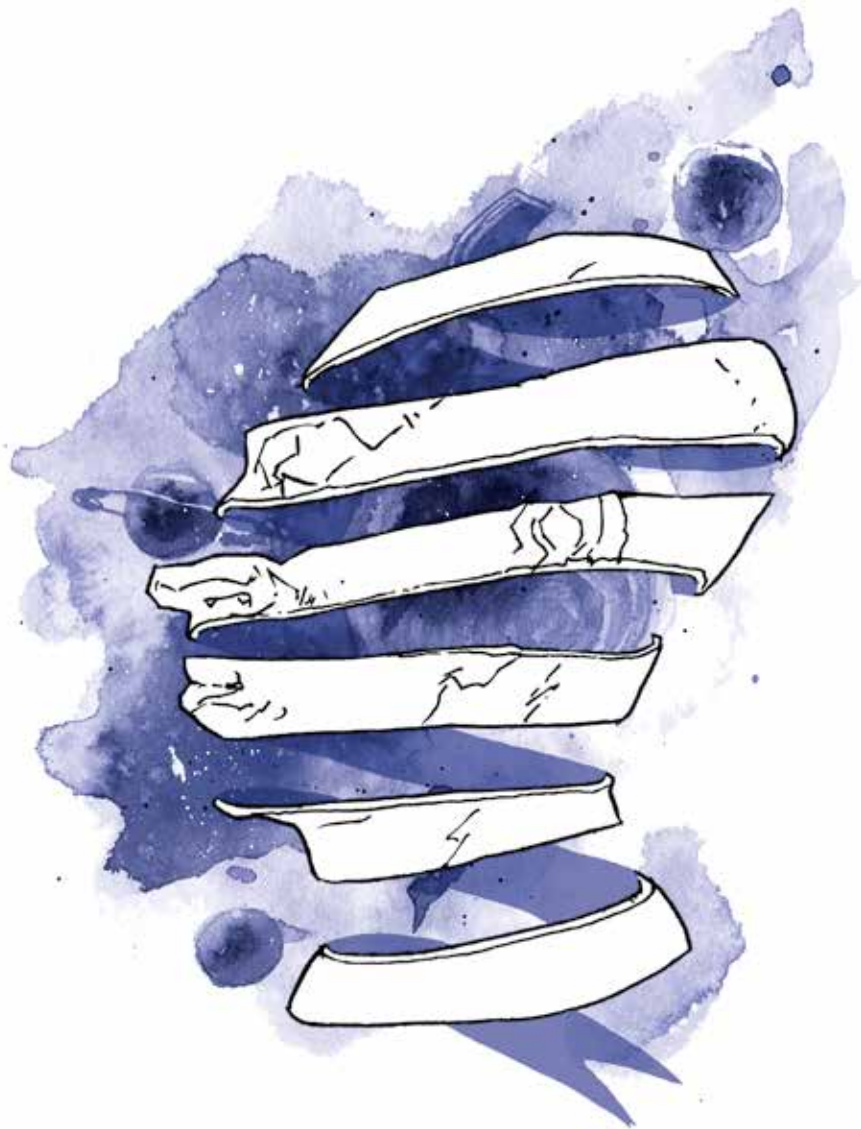
The exercise of knowing how to listen without trampling on people; The exercise of "taking off the belly," without straying from the objects that are on the ground in the middle of the way; truth must never be hidden; to know how to make mistakes, to take responsibility for it and to make it right; "to make lemonade out of lemons"; Be calm and patient to know how to wait for the other's turn; maturity and self-confidence; to chat without being full of oneself, but without failing to speak your mind, and not to follow the crowd; realize and not be gossipy much less remain in such an environment; nip the evil in the bud, this can be done in the form of conversation circles with those involved; read a lot; To be humble, but not the humility of the "whited sepulchers," being hypocrite; One should be open to learning at all times with the children. In short, these are some fundamental and daily attitudes for the education of young children.

If we could design a world as we wish, what would future education look like for you?

I hope that the education of the future is engaging, active, generous, each one learning to live and produce, create without monopolizing all knowledge out of fear of competition. Education should be open to the simple, to get closer to the craftsmen and artisans, as they have the manual experience, the empirical construction of the use of available materials, and when sought always have the attitude of availability. They are masters who educate us, with examples of attitudes, both in their arts and in life.

I really like the example of Almir Sater, with the school he created together with his wife, it truly teaches one to read and write, it spread to other schools the same style, helping families to live with their ethical, moral, community-oriented principles, simple and caretakers, preserving the universe as the Indians have always done, who still struggle for their rights usurped by the colonizers, who instead of helping, disrespect, enslaved and decimated without any moral ethics, all in the name of economic exploitation.

We should record that during these forty years, many fruits were produced with the help of Te-Arte's parents and grandparents, among them Francisco Miragaia (Father), Francisco Miragaia (Filho), Fábio Calabi, Andrea Calabi, Philippe Reischtul, Pérsio Arida among many others that I do not mention here, but to which I am grateful. Important fruits were the books "Backyard Magic" and "Back to the magic yard," by Dulcilia Schroeder Buitoni, the result of her thesis of the free teaching presented to ECA-USP and which records with accuracy how the work in Te-Arte is done. The documentary I mentioned earlier, "Seeds from our backyard," directed by Fernanda Heinz Figueiredo, who was a student of Te-Arte from two to six years old, as well as his brother Gustavo Figueiredo. Fernanda, at maturity, returned to school with a camera and the view of an environmental educator. I also recorded articles of my own published for more than a year by the newspaper Folha de São Paulo.



IF I AM THE UNIVERSE, WHO AM I TALKING TO?

Thomas Heide

HOW TO INVESTIGATE OURSELVES AS REPRESENTATIVES OF THE UNIVERSE EMBEDDING ALL TEACHING AND LEARNING PROCESSES

What I really want to share with you will most likely make me look like a total nutcase. Apparently, that is the way it has to go. I tried to write several clearheaded articles. In the first article, I wanted to show, what would happen if we transferred the hopes we project into our educations into actual society. In the second article, I wanted to propose that humans everywhere should gather in groups where all the participants have a different native tongue to investigate the possibility that humans of different languages can talk to and understand each other while speaking their native tongues. Both articles might have come out okay. The problem is that I am in fact only interested in one nerdy thing, and that is the nature of the universe or, maybe more precisely framed, how to reduce the universe to its smallest possible building block(s) through processes of curious inquiry. So rather than addressing more or less arbitrary spin-offs of this, my real passion, I finally let go of the (wonderful) bullshit and decided that I would rather produce a short text on the spot, than a long one in the margins of the spot.

I won't bore you with all the logic reasoning that has led me to believe that I have solved the mystery of the universe and created a basis for explaining accurately the how's and the why's behind the option of experiencing anything at all in the first place. Feel free to contact me if you want to learn more about this aspect of my work. What I will bore you with are one or two simple questions that should be integrated into any serious learning situation or educational program. I claim that trying to teach someone something before addressing the universal context of the teaching is at best naïve and its worst harmful or consciously manipulative. Although all standard programs of human growth assume that the relationship between the learning subject and the objective being taught is untouchable, my claim indicates, that any relationship must be sought and understood from the outside perspective rendering the relationship possible in the first place. For you and me to exist in the universe, our existence does, of course, depend on our experience of existence, yet it must be assumed that this experience is embedded in a structure that is part our experience of existence and part the possibility of the experience of existence in itself. To understand anything related to the experience of existence, we must address the possibility producing aspect of the embedding totality. In a sense, it could be said, that whatever my experience and whatever analysis of this experience, neither will have any legitimacy without an unfalsifiable blueprint of the structure motivating the universe as experience.

The problem with this claim, or viewpoint, is that it effectively removes all formal and skill related authority from the identified figures of knowledge. In effect, the claim that insight into the governing principles of everything precedes localized clusters of assumed truths is a claim that the possible procedure toward valid knowledge about ourselves and the world will not occur until we have irreversibly understood who and what we are as representatives of the objective totality in which we are embedded. Science has taken out patents on practically every property in the presently identified

universe and is as such a very powerful contender when it comes to fighting over the right to define truth and pathways to truth. To the keen observer, it is, however, obvious, that science has failed completely and most fundamentally in giving humanity a trustworthy compass and alternative to the irrational guidelines of religion in general. The critical student who neither trusts compartmentalized science nor the idea of the universe as a kingdom ruled by multiple gods therefore always finds her or himself standing with hers or his back to a wall of partly or undocumented claims and on the edge of an abyss of uncertainty where none of the rules of known scientific or religious interpretation can be applied.

Human beings, just like everything else in the universe, can be said to be the universe or belong to that which we identify as the universe. For some reason, human beings nevertheless shy away from this fact as if a mythological rule has been laid out to prevent that human beings identify themselves as exactly that, a genuine representative of the totality in which they are embedded. This text is not the place to unfold sociological archeology on a larger scale. I only want to point out the obvious, namely that physics, biology, chemistry, astronomy and space travel all depend on a rigidly defined border between an observer and an object, a border which really is more a social construction activated for reasons of instinctive behavioral patterns than the logical outcome of a series of rational decisions. To investigate the universe, all we really need is ourselves. I repeat: we are the universe. There is no "out there." Coined in the mind of the nerd, it would go like this: we as human beings are probably the closest we will ever get to the exterior of the universe and to an ideal position for observing ourselves as the universe.

I believe in my own answers to the questions naturally generated by the above framing of the relationship between humanity and world. I also believe that the most important lesson I learned from the process of challenging established science and thinking culture was, that my results, be they good, mediocre or plain madness, first and foremost were mirrors of the questions they had an-

swered. Personally, I did not do it like that, but I could have started out by simply asking: which question would I have to ask to find an answer verifying the sum of my belief systems as genuinely valid? This would lead me directly to the only relevant question pointing toward a possible answer: what is the universe? Which again would lead me to the question that actually started me off in the first place: what is the relationship between fluidity and solidity? If we want to build a sound base for learning, we must engage in the basic question: what is the universe? This question does, however, tend to produce abstractions rather than applicable answers, since the question itself carries the virus of science, the quest for subjective-independent objectivity. The production of workable questions requires a syntax that brings the universe back to the subject and eliminates the trap of dualism. One way to create such questions is to bring together complementary properties present in both the supposed outside and the supposed inside. In the case of the proposed opposition, subject versus the universe, such complementarities can, for example, be identified as fluidity and solidity. I am, yet I am changing. The universe is, yet it is changing. The universe and I share these complementary properties. Although it would be misguided deductivism to say that the sharing of any given property makes the sharing parties alike, it is true, that the experience of the subject and the subject's experience of the universe is an experience of something that changes and therefore never appears as itself. Asking: what is the relationship between fluidity and solidity? This makes it possible to investigate some of the most fundamental properties of the universe subjectively and objectively simultaneously. The important feature of and the reason why complementarity must be present in the question is the inherent discovery of a question born from paradox, that something is not right and that this flaw has not been appropriately addressed by mainstream science. A good flaw is always expressed in the mutually exclusive. A good learning process is figuring out what the paradoxical flaw is trying to make right in the self-preserving habits of our collective

cognition. It goes without saying, that your question should be experience based or empirical. If you are the universe, your experience is the experience of the universe. So: how come I experience myself and myself as the universe as both solid and fluid?

If you want to boost the learning processes you are facilitating, or you want to boost your performance as a student, no matter your age, general background, features, properties and educational level, it is my claim, that your students and/or you yourself will benefit tremendously from reclaiming the patents on the idea of the universe, whether it be by designing your own, experience based questions inquiring into mutually exclusive properties in the totality of the universe or it be by lending my questions and reshaping them in your own image. By bringing these type of questions into your learning process you acknowledge that more is at stake than the microcosmos of humanity and earth, and that true learning depends on our ability to integrate the prerequisite of life itself, namely the understanding of the universe in its totality.

If you are at a loss at this point in my presentation just use the following as an anchor when jumping off the cliff: if I am the universe, I must have a thousand questions to myself. For instance: If I am the universe, who am I talking to?



INTERVIEW WITH TIÃO ROCHA

by Tathyana and Philippe

If you could project the world of your dreams, how would education of children and youth be?

This is not only about how I wish it should be but also what I think will actually happen in a few years or maybe a bit further ahead, in 2050, a little distant from our generation. I think that education will be understood as integral learning, not necessarily in schools.

In fact, I am not sure if it will be necessary to have schools in the future. It will be necessary to have permanent learning, where children can learn all they need at their own pace and rhythm, according to their biological and intellectual age, using all the resources available to them, in their families, communities, their surroundings, and what will give sense to this is a society evolving towards the realization of its human capacity. If we think that this place where we live, this condominium called Earth, needs to become a more humanized place, for everybody and forever, then I think education needs to seek this goal, which is the plenitude of our humanity. That is what I believe in and what I dream about. I will not see it happen for the entire world, but I hope it happens someday.

How do you see the role of current educators in the process of transforming education?

I think we are at a moment where each one needs to mark a position. The question I asked myself 30 years ago is how to learn to differentiate the role of being an educator from being a teacher. I still think this is a dichotomy. They are not necessarily synonyms or complete each other. The teacher is someone who teaches, and the educator is someone who learns. Fundamentally, we need to form educators, permanent apprentices of new pathways, new ways of building a better world, not necessarily a teacher. You can be excellent in repeating other people's ideas, citing bibliographic references and footnotes, always speak between quotation marks but don't speak from the viewpoint of your own life experience. I think one day we will move from this "teaching" role and these people will have the role of learning. As apprentices, they will necessarily have to build their own pedagogy, a way of each one contributing to this process. We are still in the phase of understanding that educator and teacher are not synonyms.

So you understand that we are still in an introductory stage of this transformation process?

I feel that all phases in our lives are moments of passage and transformation. As Guimarães Rosa would say, humankind is a journey, and we are always on this journey, in this path. If we build the third margin of the river, it will be a slow, costly process. But I think that today we either want the planet to destroy itself in a short time, or we want to preserve it for future generations. So, the adequate use of technologies, bioscience, nanotechnology, according to values and ethics of a world from everyone, without exclusion, hunger, misery, is a fundamental discussion for us to think what we want. In this regard, and for a matter of survival, it is best to think a World for everyone rather than a World for few. The role

of education is about learning to live this better world. This will be the supreme function of educators: overcome this dichotomy between teacher and educator.

How can education drive the transformation of society?

It has to be together, it is a relationship, which in a first moment can be through the pedagogy of conflict between different world-views. It is about adjusting and creating coherence between different people with different viewpoints. Learning is about occupying empty spaces; it is complementarity, dialogue, this is the natural pathway. The big question is that today, in many places, what we see instead of the pedagogy of conflict is the pedagogy of confrontation, which tries to impose certain logics over others. Then it is not a relationship between differences but between inequalities. People, institutions, ideologies, that assume the supremacy of technologies over humans, of sophisticated technology over social relations, the substitution of human contact by only virtual contact, a tentative of imposition, as if these were things that cannot coexist, would have to respect the limits of each one and not substitute one thing for the other, because they are complementary. Once we overcome the stage of confrontation, the practice, the experience, is the discovery of ways to conciliate, the traditional with the contemporary and how these things can be in dialogue, this should be the good way to go.

Can you give examples of how you see this happening today?

I work in the Jequitinhonha Valley, which is historically delimited by fatalism; it is the "hunger valley", the "valley of misery." This causes an absolutely negative impact on the mentality of the local population. Almost since birth, there is a self-prejudice for being born in a place that is doomed to failure. We thought of how to break this long historical process and be able to day by day come out of

this hole. When the new generations start to work with us on the project with technologies, software, cinema, we show these children the half-full cup instead of the half-empty cup. To do this I didn't go there to discuss the future, I went way back in the past and invited everybody to read "The Invisible Cities," by Ítalo Calvino, which is about Marco Polo telling his stories to the sultan. This is part of the universal literature memory, and for me, it is an emblematic book – a guy who spent his nights telling the sultan about all those cities he had visited. Did all those societies really exist or did they only exist in his mind. It is so well told and so well built, that you almost sense the smell of those places. Then this story comes back to Araçuaí to see what is invisible there but still survives. They went to seek their traditions and values, through conversations with their grandparents and elders, in the folk songs, all these things that give meaning but are not seen. They went after all this and told these stories in one-minute videos or games, databases. I don't understand much about this software stuff, but they go there to do this, to build the bridge between sophisticated technologies and what is most primary in the formation of their communities. This act of drinking from these sources to project the future is essential, and there is nothing new to this, but it is just giving it a new meaning. As Guimarães Rosa says, if you want to go to paradise you have to pray in all religions. Because a religion just for myself is too little. If the person wants to go to heaven, she prays for all religion because she doesn't know which one will work. Drinking from all sources is a way to feed yourself and project where you want to go. So, if paradise is your goal you hold on to all saints not leaving a single one behind because he might be the one who holds the key that opens the door!

What aspects of the current education need to be preserved for the future generations?

I think that what must be preserved is the valorization and autonomy of the educator as a central actor in this process. I learned

throughout 30 years that yes, it is possible to educate in any place, without a school, underneath a tree, but it is impossible to carry out good education without good educators. Only good educators can perform good education. Unfortunately, the contrary is also true. So the idea that I carry with me is to discover where the good educators are. We noticed that they are not necessarily formed by the schools and universities. They already exist and live in the communities. The idea is how we can wake up these people so that they can occupy this social role of generating learning processes. Preserve these professionals of education and guarantee that they can be designers of pedagogies and methodologies and that they always speak of lived and reflected experiences and never become a person that is only quoting others. This is a relationship based on faith. This reminds me of Eduardo Galeano's work, "The Book of Hugs." Galeano, who unfortunately left us recently, traveled around Latin America listening to people and harvesting good stories and capsules of wisdom. There is a very short that summarizes this very well. "Diego had never seen the sea, and his father took him to visit it. They got into the car, traveled and reached the beach, crossed the sand dunes and when the boy reached the sea he stopped and stared for a long, long, long time in absolute silence, and after this silence he turned to his father and said: 'can you help me to see?' and that is the end of the story. Galeano called it the art function. When I read this story, I asked myself what would his father have replied, because now it is not the art function but an educator's function. He could have avoided it and said: 'let's go, you have seen it, there will be traffic,' or 'later you research, ask your mother.' A more daring one would say 'get in there, enjoy it!' But what I think an educator would have said for each 'helps me to see?' is "teach me what you saw!" That is what will always happen, with a child today or in 50 years, they will ask the same question "help me to see," "I came here so that you can help me to see." What you on the other side needs to sense is "where do you want to look?" Forwards, downwards, inside, up, far away?, "teach

me what you have already seen, show me a bit of your sights, let's look together." I think that this logic of seeking sights, to where we will project our future, our dreams, and our utopias, is the role of the educator. A person that can engage in dialogue with each "help me to look" – "teach me what you have seen" and build together a space of dialogue and resonance of these possibilities.

A more personal question. Who or what "helped you to have this look" on education?

Ah... I think there are several; I gave a lot of work to my analyst... I think that my first impact, and of course the awareness of this is much more recent, but the fact happened a long time ago, is when I was 7 years old. I went to school for the first time at the Escola Sandoval de Azevedo, and on my first day the teacher Maria Luiza Travasco sat everyone on the floor and took a book of Dona Lúcia Praça Santos, "Most Beautiful Stories," and started to read. "Once upon a time, in a faraway place, there was a king and a queen", I raised my hand and said: "teacher, I have an aunt who is a queen", she said "good, now stay quiet and pay attention to the story" and went on reading the story and after some time I raised my hand again "I have an aunt who is queen", and she said "that is not true, it is just a story that someone made up to play with you", the third time that I raised my hand she said "shut up, be quiet, you are disturbing my class". Then I was taken to the director's office. "Do you want me to call your mother? Do you want to be grounded? Or will you stay quiet?" Without options, I stayed there and did not open my mouth again. After that, I went to high school and thought, "now it is different," but I had an awfully bad luck. The first day of class, Brazilian History course. The teacher started "The kings of Portugal and Spain..."

I raised my hand and said "teacher I have an aunt who is a queen" and he said "what is your name?"

"Tião"

"Ah, come on don't push it, you are joking," he shut my mouth, and I never asked anything else in school again. Then it came the time to go to university, and I had no interest in any of the programs. I went to Ouro Preto and was reading a book called "To an Unknown God." It was a very cold and rainy day, and I was behind the Mercês church, behind the graveyard and had drunk a few doses of *cachaça*. I don't know if it was the book or the *cachaça*, but I had an insight – I realized I knew nothing about the history of Ouro Preto! In fact, I knew nothing about my own history! I remembered my aunt who had died many years before and decided to study History at University in Belo Horizonte. I think I was the best student of the History program. I knew the names of all king and queens you can imagine. And never had any history about my aunt. In my last year, I spoke to Professor Caio Boiss, "I came here to study the history of my aunt!" and the professor said "you came to the wrong program, you should have studied anthropology."

I then studied anthropology and specialized in popular culture, and by chance, I found a fragment of her story in folklore stories. My aunt was the perpetual queen of the *congado*, a typical afro-brazilian Christian manifestation. Every August and October, each Sunday, the brotherhood would go dancing and singing in a procession for the Virgin Mary, and the queen would go with the staff. It was true. One day, I suddenly understood that I needed to identify other queens, kings, dynasties and nephews around other regions. So this was the first.

The other one was painful. When I graduated and started teaching, I taught history classes for many years in many places. Classes started at 7 in the morning and would go until 11 at night. One of the schools was very small of rich families from Belo Horizonte. I had a class in the last year of the primary school, which was a special class because there was a very special kid named Álvaro. When I realized that on the following day I was going to teach this class, I stopped whatever I was doing to study because I knew that when I greeted good morning, he would come up with a question.

He read everything I asked him to read and much more; he always had a question, he basically changed the way I used to teach. I would make a circle, get students to read and engage in debate. It was so intense that time was short to end all the things we were doing. He was a brilliant boy, played football, was popular with the girls, and a nice, happy person. One day when I arrive at the school, there was confusion and many cars leaving. “Guys, what is going on?”, and then the answer had to do with Álvaro; he had died. “But how? He is 14 years old, Álvaro died, and we are going to his funeral.”

When I arrived, a couple approached me and asked “you are professor Tião Rocha?”

“Yes!”

“We are Álvaro’s parents.”

I said “What happened to him?”

“Professor, Álvaro threw himself from the top of a building.”

I said, “But, why?”

“We don’t know why...we are searching for information, some answer, a letter, a note, but we haven’t found anything” but the mother said that Álvaro was all the time talking to me during lunch. He would say: “Teacher Tião Rocha is the guy, he knows about many things and I want to discuss with him.”

His mother said to me that I was frequently in most of the conversations they had at home. She said: “tell us, professor, why did our son kill himself?!”

And I said “I don’t know”

“But how come you don’t know?”

“I don’t know, I am sorry, I don’t know...”

“If you don’t know, no one will be able to know.”

“I am terribly sorry, but I don’t know...” That was a very strong moment, and when I left the funeral, I realized there were only two alternatives: either I would never go back again to a classroom because of the impact of losing another child or I would get back there and never lose another kid again. This was my option. We looked at all Álvaro’s texts, everything he had written, his poems, I

was always searching. It is likely that he had mentioned to me that he wanted to jump from the bride of life and I am pretty sure that he said something, but I didn’t hear because I was so motivated to discuss the Russian revolution, the French revolution, British imperialism, all History’s problems, that was the point of our conversations.

At that moment, I understood that I am not interested in being a history teacher, teaching contemporary history, and talk about French, Russian, American revolutions, if I can’t first understand the history of my students. So I changed radically. From that day on my interest has been to hear about the other, learn with the other, the possibility of sharing, and this changed me.

Álvaro became an angel, my angel, wherever I go, he is with me giving guidance and inspiration. I committed myself to the purpose of not losing any other child. Of course, I have lost others, for other reasons, and you start learning to close several taps... one day I want to learn to be an educator because an educator is a person who doesn’t lose anyone. This should be the role of the school, not losing anyone, guarantee excellence to all. So these are the two turning points in my life, which inspire me, he is my angel and is here now while we talk.

How do you see this global transformation process happening in Brazil?

Some years ago I learned to stop myself from looking at any place, territory, community, state or country from a half-empty cup perspective. I don’t measure deficiencies, lacks, failures or problems. We have the Human Development Index (HDI) to measure these things, economic, educational, health problems which are the empty part of the cup. I realized that works based on the HDI, like all public policies, are not transformative, they are reformist because when you look at people or communities always from the empty part of the cup perspective the solution is never in there, it is always out-

side. In the empty cup you have to fill it up, put things in it, and when you do this it is usually something that doesn't mix with the rest, like oil and water, there is no transformation.

I realized that when you put in something from outside, it disappears and maybe very little stays. Sometimes there are so many necessities that the only little thing that is there is the resistance and this cannot be seen through the view of HDI. So we created an indicator called Potential Human Development Index. What gives potency to human development? The capacity that is found everywhere to embrace, live together, learn and find opportunities. So I work with these things: embracement: creating a welcoming space in order not to lose anyone; coexistence: to not exclude anyone, respect all differences; learning: of contents, abilities, attitudes and; opportunities: for each person be truly realized and do the best things. If you put all this together, you have the word ACTION, and when you look at the bright part, you see where you need to walk.

That is what we have been doing with CPCD, in the Jequitinhonha Valley, in the interior of Maranhão, south of Bahia, in Africa, Mozambique, in the Peruvian jungles, which are places that, if I were to look at the empty side of the cup, the problems would seem unsolvable. When I look at the other side, the half-full part, we start to think how to build centers of excellence in rural education (educação do campo) and sustainable development. This is where we have been putting our attention, to think the territory, think those units through rural family houses and rural family schools. In the territories that don't have these initiatives, we create this process and this cause. It was in the Jequitinhonha Valley where we started a center of excellence in rural education. What does this mean?

Well, there are some important dimensions that it needs to cover. First of all, it needs to offer integral, human and inclusive education, which is, not losing any child for the sugar cane harvesting, no one abandoning school to work. Then we work with a formation based on the Earth Charter. For me, this is a crucial

point to address this question. Some time ago we realized that the Earth Charter is the most important document that humankind produced in the XX century. There is nothing more significant or important than the Earth Charter. It was discussed over 10 years in 185 countries, involving more than 5.000 people and institutions. For me, it is the most important 16 principles and objectives, but it is beautifully well kept in Costa Rica. How do you put this in practice?

So we included the 16 principles in the education process: how do we form ourselves to live well in our dwelling in an ethical way? That is one base. The other is the formation in permaculture and bioconstruction. How can we work in harmony with nature and fulfill everyone's needs without degrading the environment? After that we worked with Alternation Pedagogy, where the children spend 15 days in the school and 15 days in their communities, in an open space, putting in practice a plan that integrates the contents seen at school. We don't have disciplines, no walls, what we have are themes. For example, in Maranhão, we have a few indicators – this year we will achieve self-sufficiency in water supply through water harvesting systems. Next year comes food sovereignty so that the food served in the school can form local production, and in the third year economic sustainability so that we won't have to ask people for money anymore because we will be producing our stuff and be running our projects. This experience of how to run projects for self-sufficiency with local resources started there, but we are already going to Amapá, Guatemala, Uruguai, Colômbia and Africa. It is possible to take it anywhere else because it is an idea, a flag, and not a recipe of how to build a center of excellence that proved to be possible.

The other major current challenge for me connects to a year ago, on 1st of May. I stopped to watch President Dilma's speech, and she was saying something about the Pré-Sal, and at a certain moment, she highlighted the importance of the resources coming from oil extraction because she wanted to think Brazil as an Ed-

educational Nation. I was amused because I never thought I would hear Dilma proposing an Educational Nation. I spent the whole night thinking that Darcy Ribeiro, Cristovam Buarque, Rubem Alves, Anísio Teixeira could have said this, but it was her... Then I started to imagine what it would take to build an Educational Nation. Then I went back to Guimarães Rosa, that had the following expression “Minas, little nation.” What did he mean by “little nation”? Was it a group of people? A state? It is much more. It has depth, affection, value, but unfortunately, we gave up thinking as a nation and started thinking as government. More than that, it is to think this place, this territory, and this mixture and also define it as Educational.

The next day I created a Facebook page with this theme “Brazil, Educational Nation.” I started to think, lift a flag, a personal cause; I spent the year thinking, talking about this. It is a pity that no one in the government was able to see the dimension. There are those who say it became pure marketing, but for me, it is still a flag, a cause. I see myself as an optimistic, and that we will have transformative experiences that show other paradigms. I spent some time in Costa Rica, and there they don’t say “good morning,” “good afternoon,” they say “Pura Vida – pure life” and nothing more that is it. Which is much better than good morning, it is something fantastic. Things like this happen in Bolívia, South America, and are experiences that are not present in the media and neither in the academic discussions, but they have transformative power. I believe and want to contribute to this process.

I was just now reading a text by Adalberto Soares regarding Utopia, and he says something simple, that the individual dreams are a utopia of the community and that utopia is not about thinking something impossible, like Don Quixote, a divagation. We are moved by those things which haven’t been done yet, right or wrong, good or bad; we will use, we will carry these memories, inherit them, pay a historical price because of stupid things that other people did. But when you think about what has not been done yet, are these

advances going to end with the utopia, the human dream? I don’t think so because this technology is also the result of utopias. If this was done in sciences, we could do it in all areas. Sometimes people ask: how do you think that the Brazilian educational policy should be structured by the ministry of education. For me it is simple, MEC should determine that all public and private schools, from kindergarten to post-doc, need to organize their agendas, curriculum the way that they want but based on the Earth Charter, that is all. Will you become a doctor? Yes! But your undergraduate program was based on the Earth Charter. You graduated as a lawyer, nurse, mechanic, and you learned to take care of each other, caring for life, for the planet. There must be a more sophisticated formation, in technological terms and deeply connected to a cause, which is the reason for our time here, it is short, life does not have a second turn. That is it.

Thank you very much Tião!

FROM A PYRAMID PARADIGM TO A NETWORK PARADIGM

Yaacov Hecht

YAACOV HECHT IN CONVERSATIONS WITH SIR KEN
ROBINSON

In 1987, I had founded and run the Democratic School in Hadera, Israel, an experimental public school for four hundred schoolchildren age 4 to 18 years old. In a democratic school, each school child builds his personal study program and determines what to learn, how, when, where and with whom. The school is run democratically, and all the teachers, schoolchildren, and parents are welcome to be partners in the school's management.

With time, I have been involved in the foundation of similar schools both in Israel and worldwide and developed professional training, which is designed specifically for teachers in democratic schools.

Increasingly I have started to lead processes in the spirit of the Democratic Education in hundreds of traditional schools and from there, launched the development of the *Education Cities model*, which goal is to transform the entire city into one big school. In *Education Cities*, the organization I am running today, we develop municipal collaborations between public institutions and private organizations that are active in the city, for the goal of expanding the unique development routes that are available for each school-



child. As of today, we are active in more than 10 cities and towns, working with about 10% of Israeli schoolchildren, and the rate of our development is increasingly growing.

Many times, I have been asked, why have I chosen to call the school in Hadera “Democratic?” Is it not that every school in a democratic society, is a democratic school?

I have named the school in Hadera “Democratic” because I realized that the old school model that had prepared schoolchildren for life in the non-democratic society of more than a century ago, could not keep on existing and preparing schoolchildren for life in the democratic society in which we live today. Schools in the past, which had prepared its students for life as workers in an industrial factory, which mainly required discipline and obedience, cannot prepare them for life in contemporary organizations that call for creativity and for taking initiatives. I have realized that democratic education is the missing piece in the bigger puzzle called a democratic state.

The interface between an education system that prepares its schoolchildren for a world that does not exist anymore, and the social technological reality that rapidly forms before our very eyes, is one of the causes of the “fracture” that triggers the development of “massive Tsunami waves” which explain some of the social-economic crises we have been recently witnessing.

In this paper, which is written almost thirty years after I started my journey as an entrepreneur in the education world, I will talk about the “Tsunami” waves and their consequences. I will also attempt to explain the mechanism that activates these waves.

Concurrently, I will share with you insights from my journey in the process of implementing innovation in the public education system. Processes, which demand the change in the old educational paradigm, the Pyramid Paradigm and a shift to work in a new paradigm, the Network Paradigm.

Before we set out on this voyage, I wish to thank my friend, Sir Ken Robinson, for his important support in the process of writing this article. Sir Ken Robinson and I have lectured together in the 2010 AERO

Conference in Portland Oregon, and since then, we have been holding stimulating conversations – an amazing source of inspiration.

I also wish to thank, Sheerly, my wife, who vigorously defends every letter in the process of accurately writing down the ideas.

And to all my friends in *Education Cities* – it all begins with the discourse I hold with you.

“TSUNAMI TIME”

In recent years, we have been witnessing big changes in every aspect of life. In fact, many believe that these are merely first signs for much bigger changes, which rapidly approach us and are indicating on the revolution in all sections of society.

John Hennessey, Stanford University President, has issued, in the summer of 2012, a “Tsunami” Warning in the New York Times. Hennessey was referring to the “Tsunami” that is about to change the world of higher education as we know it today (mainly in light of the development of MOOCs). Nonetheless, many other parties around the world have started to use the same metaphor to explain the socio-economic situation in the world today – in other words; the “Tsunami” poses a threat to all the various aspects of our lives (and not only to higher education). See, for instance, an illustration that was published in the Economist on January 18, 2014.

Huge tidal waves of innovation are about to flood us and to trigger the destruction of the old social-economic systems and the emergence of meaningful changes in the structure of the society in which we live. These waves carry with them great perils and unparalleled opportunities. It is important to point out that this is not a single Tsunami event, after which everything will return to normal; This is a new era – “an era of Tsunami waves” which is characterized by routinely recurring Tsunamis. In the past, the shift between using a horse and carriage, for instance, to a car, spanned over many years. Therefore, the strike that had been sustained by professionals was also gradual. In contrast, today, many lines of work undergo

revolutionary and rapid changes, and every change of this type generates a loss of many jobs in a very short period.

Familiarizing ourselves with the nature of this Tsunami will be instrumental in preparing for it. To accomplish this, we have searched Wikipedia and learned about the five stages of the geographical term of ‘Tsunami’:

- » An earthquake rocks the ocean floor
- » The fracture generates an upwards movement of a large body of water
- » This body of water becomes a wave that starts moving towards a shore
- » Just before the shore is flooded, the shoreline recedes, exposing a large area of land
- » The tsunami wave floods the land

This begs the question; in what stage of the “social-economic Tsunami” are we? In some places in the world, the “Tsunami” is in the fourth stage – a receding shoreline – and attempts are made to protect the existing status by use of tools that worked well in the past but no longer work in the present. For instance, an excess of exams that flood some of the education systems as an attempt to protect them from the emerging changes. In other places, the “Tsunami” is already in the fifth stage, and the tidal wave is beginning to wash the shore.

See, for instance, the expansion of the “Lost Generation” effect – young people who followed the “right academic track” that promised them success in life, and found themselves without a job and with no future. These young people realize today that the education system did a wonderful work in preparing them for “life in the past” but not for life in the present and most certainly not for the future.

Another example is the city of Detroit, USA, which filed for bankruptcy on July 18, 2013. Detroit, a city of two million residents, used to be the US capital of the automobile industry. The Tsunami that

hit Detroit was in the form of the relocation of most of this industry to the Far East and the replacement of thousands of workers by robots and lean work crews. Tsunami waves are driven by force labeled as “Disruptive Innovation” by Professor Clayton M. Christensen. Disruptive Innovation is characterized by two main components:

- » It makes complex products and processes simple
- » It reduces the cost of different products (often making them free for the users)

These two processes essentially drive global innovation. For instance, the development of digital photography caused the extinction of film-based photography, a lengthy and costly process that required special development laboratories. Today’s photography is instantly, accessible and free. Or, for instance, telephone calls, which became dynamic (available from anywhere) and free.

There are numerous imminent innovations, such as the autonomous cars revolution, which will completely eliminate the need for drivers, or the 3D printing revolution. In essence, the two characteristics of the Disruptive Innovation are ubiquitous, these days, in every aspect of our lives (transportation, energy, medicine, agriculture, communication, and more) in the form of accelerated technological developments, which have produced and will produce in the near future a massively long chain of social changes the nature of which has awakened a debate. Indeed, as aforementioned, we are facing a new era. And if changes in the past had been gradually introduced, today they have been accelerated. The Tsunami waves will become a routine event in our lives.

Jaron Lanier, one of the leading people in the global high-tech industry and a pioneer in the field of virtual reality, who believes that technological innovation will produce the collapse of the giant pyramids followed by a severe strike to the middle class.

After spending 30 years assisting in driving humanity into a new technological era, Jaron Lanier admits: “I was wrong. We have

lost our way.” As an example for the internet’s destructive effect, he brings the collapse of the Kodak Company and its 10,000 employees, as compared to the emergence of Instagram and its 13 employees: “We, the technology people have forgotten some of the responsibilities we have to the rest of society. We have promoted technologies that have an anti-human dimension, which have bankrupt people instead of helping them. This does not work. The paradise we are creating simply does not work for a large number of people.”

In contrast, **Peter Diamandis**, founder, partner and chairman of Singularity University, and founder and chairman of X PRIZE, believes that we are on the verge of an unparalleled era of abundance (Abundance is our Future) in mankind’s history, and that the overflowing on-line creativity will solve all the major problems faced by the world today.

Hence, if we wish to know how to deal with the “Tsunami waves,” we must first understand their movement; where do they originate and in which direction they are headed. If we can answer these questions, we will be able to build tools for predicting the tracks of the Tsunami waves – towards which shorelines they are headed, what is the expected force of the waves and how we can minimize the destruction, and predominantly how we can enhance the opportunities they carry with them.

FROM A PYRAMID TO A NETWORK – A PARADIGM CHANGE

We believe that the main cause for the rise of the “Social-economic Tsunami waves” (the fracture in the bottom of the ocean) is the emergence of the “Knowledge Wave.”

In his writings, Alvin Toffler describes three economic waves:

The Agrarian Wave – in this period, most of the population had made a living from work in agriculture.

The Industrial Wave – in this period, most of the population had made a living from work in industry.

And the Information Wave – in this period, most of the population makes a living from work in the field of information.

Nowadays, a fourth wave is emerging from the Information Wave, the Knowledge Wave, which is, currently in its early stages of development. At its peak, in the future, most of the world’s population will make a living from creating new knowledge. Is this situation possible? Are all people sufficiently creative to produce new knowledge?

How can we even imagine that what was once the fortune of a few exceptionally creative geniuses – an extremely rare group in the population – will become universal? In our old familiar world, this kind of phenomenon is, indeed, inconceivable. However, our old familiar world is about to change completely as a result of the emergence of the Knowledge Wave. And the fundamental change will be expressed in the creation of a new labor paradigm – if during the industrial wave and at the beginning of the information wave, people worked in pyramid-like⁶⁴ organizational structures, in which ideas traveled mainly in a top-down direction; nowadays, more and more of the work takes place in network structures^W, organizations in which every member is both a developer/producer and a consumer (Alvin Toffler calls this a *Prosumer* – a consumer who is also a producer). Dr. Moisés Naím explains this as a colossal phenomenon of the collapse of the old centers of power.

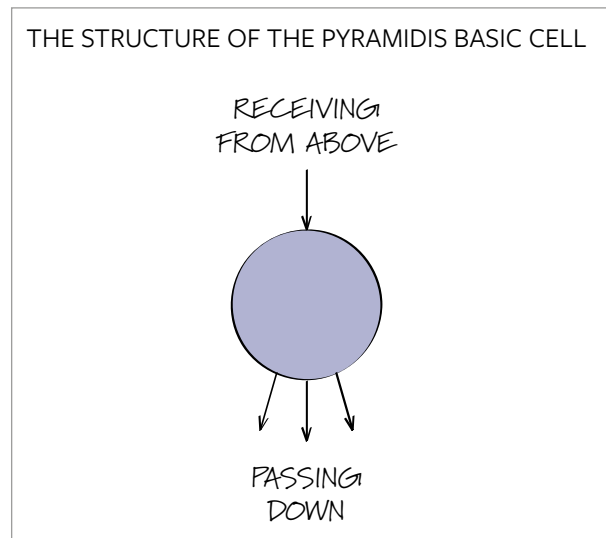
If Jaron Lanier is right and the majority of humankind continues to live in social, economic systems that work in the old pyramid paradigm, the collapse of these pyramids will result in a severe blow to massive segments of the population. In a similar vein, Professor Tyler Cowen describes the future, in his book: *Average is over*, as a world of extreme ends. 15% of the population will be rich and the rest will be poor. Hence if Peter Diamandis is also right individuals who will work within the framework of social and economic networks will experience a world of abundance.

I believe that Lanier agrees with this assertion too. Assuming that most of the population would be able to work in a network setting. Though is it possible that most of humankind will start to work in knowledge producing networks?

To understand the transition from a pyramid paradigm to a network paradigm, we must, first, familiarize ourselves with the structure of a “pyramidal cell” and a “network cell”. I have built such a model when working on development of education systems. And secondly, we must try to shed light on what are the conditions that will facilitate the emergence of this change.

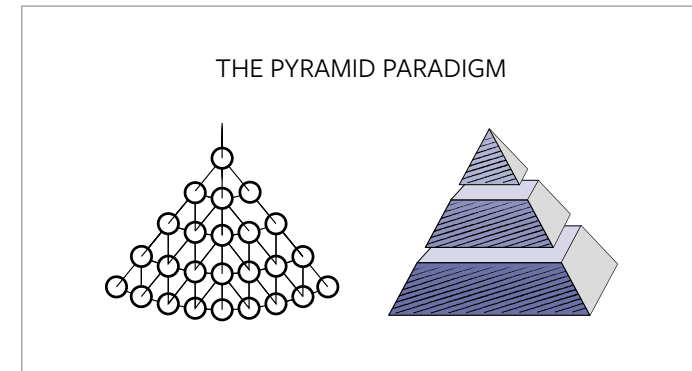
CHARACTERISTICS OF A “PYRAMID CELL

A pyramid cell is a “transfer cell“ and it is a hollow cell. Its function is to receive information from “above” and to transfer this information “down.”



The pyramid cell is hollow because its function is transfer. It is prohibited from intervening and changing the “information” that passes through it, and of course, it is prohibited from giving it a unique color or independent thought. It must perform a “transfer” task only. Hence its tremendous usefulness during the Information Wave, when the main task was a transfer of information in a downward flow.

The pyramid cell represents a single component in the society – a person or an organization or group. Following is an overview of a pyramid-based group:



The Pyramid Paradigm Everyone is in a competition – the goal is to move upwards to a higher level, to reach the uppermost levels, where the power, success, and influence are centered

Ideas flow in a top-down direction

The role determines the individual’s status (the cell)

WHY DO PYRAMID ORGANIZATIONS FAIL TO SURVIVE THE TSUNAMI WAVES OF INNOVATION?

To survive, an organization must rapidly adapt or generate new ideas. The success of such a change leads to the realization of the organization’s goals in simpler and more cost effective ways (as previously mentioned, these are the two components of innovation). A Pyramid Organization is essentially a “**preserving organization**” which has difficulty with rapid changes. Innovations, by nature, are more prone to failure than familiar ways. The decisions to set out to new experiments require a long process of authorizations. Typically, these authorizations are issued by people who are located in the upper levels of the pyramid and whose main concern is preserving

things as they are. Innovative ideas that form in the lower levels of the pyramid sluggishly work their way up, to avoid inflicting damage to the “authorizing” level and also due to the long time which is required to find the “safe way” to implement it. The “safe way” enables giving credit to the “authorizing” party in case of success and steering clear from harming it in the case of failure.

Innovative ideas that are generated in the top of the pyramid will, similarly, be delayed by the pyramid’s middle levels, who will perceive the delay as a way to maintain their status, in light of the conventional wisdom that “when we start making changes, we do not really know where they will end...”

And ideas that are introduced from outside of the pyramid will, most likely, be ignored, out of the belief that everyone who is outside of the pyramid falls under the category of competition.

Thus, when the pyramid paradigm is employed in a group/organization, the basic assumption is that each cell is hollow/empty, and the central question, which is asked, is, with what should the cell be filled? In this way, a cell that has been filled, for instance with “blue color” would transfer the “blue” to all the hollow cells below it.

Ordinarily, in the old education field, the administrative people ask themselves, what knowledge do head teachers and teachers lack? And the teachers later transfer the information they have received to the schoolchildren. The principal question is how to transfer the information in the most efficient method, and in such way that will guarantee that most of it will reach/fill the “empty schoolchildren.”

None assumes, at any level, that perhaps there are heads of teachers/teachers or school children who already have knowledge that may assist and may make the educational/learning journey more effective.

CHARACTERISTICS OF A “NETWORK CELL”

The function of a network cell is to serve as a “creation cell” as opposed to a “transfer cell.” The goal of a network cell is to generate new knowledge. A network cell has three characteristics:

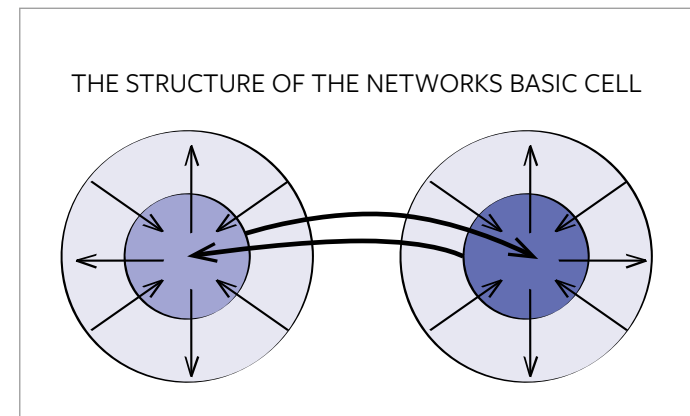
It has a “unique color” – a color it developed for itself. Every piece of information that reaches the cell (from different directions) is influenced by the cell’s unique color.

It receives information from every direction (learning from colleagues, supervisors, and schoolchildren).

It transfers information to every direction.

When we talk about finding a “unique color,” we refer to the process by which individuals or organization finds its “element,” as described in **Sir Ken Robinson’s book**. In other words, finding the place where our unique talent merges with our passion, is an essential prerequisite for the development of a network system.

Subsequently or concurrently, receiving knowledge from every direction and transferring it to every direction is meaningful. One may say that a central component in the development of the “element” is guiding or sharing our unique knowledge with others.



A network cell is a “social being.” It is realized when it comes in contact with “another network cell.” One may conceptualize a single network cell as “potential energy.”

When two network cells come into contact, each cell transfers to the other “its unique color” and by which turning its potential energy into kinetic energy, or in other words, to energy that forms

during movement. And in the same way as in physics, the greater the weight and velocity of the cell, the greater the energy formed.

The 17th-century philosopher, Gottfried Wilhelm von Leibniz, called this *vis viva* (Latin for “living force”).

For this reason, the more well-defined and developed an individual’s or organization’s “element” (the weight) and the higher his/its learning ability and his/its adaptability (velocity), the more meaningful is the energy formed in the network, and, in turn, the organization answers the definition of a “living force” and becomes a “living organization.”

Hence, at the heart of the paradigm change rests the distinction between life and the machine. The pyramid works as one big machine whose members are parts subject to its rules. On the other hand, the network organization works like a living organism whose members, in accordance with Leibniz’s theory, nourish and develop from the energetic exchange between them. They have internal creation powers that are independent of the demands of their “supervisors.” A network organization is one that perceives individual’s uniqueness and the development of collaborations, as a great opportunity for the advancement of the organization. When a “living organization” comes across the Tsunami waves of social ideas, instead of destroying it, the waves’ simplicity and the economic capacitation, expand the organization’s choices for expression and cooperation between its members, providing opportunities for the generation of new ideas and groundbreaking initiatives.

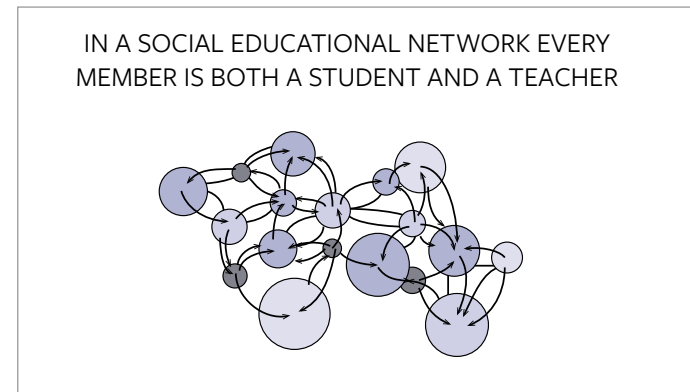
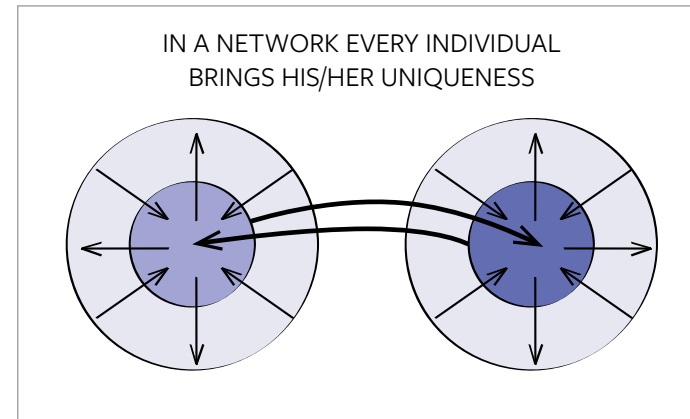
THE NETWORK-BASED ORGANIZATION – A LIVING ORGANIZATION

When some “network cells” make contact with one another, living, network-based organization forms.

Characteristics of the network-based organization

- » Each member is encouraged to express his/her uniqueness.

- » The organization invests resources and intentional effort in support and assistance to every member of the organization, in his quest for finding and expressing his uniqueness.
- » The organization gradually develops collaborations between its members, for the goal of finding, defining, and expressing the “organizational element,” or the organization’s uniqueness.



Pyramids can exist in a network-based organization, and networks can exist in pyramids. A network member may be located at the top of one pyramid and in the bottom of another.

WHY DO PYRAMIDS COLLAPSE AND NETWORKS GROW NOWADAYS?

In a pyramid structure, people play machine roles. Charlie Chaplin's film, "Modern Times" is a good example for this. The collapse of the pyramid stems from the emergence of a Disruptive Innovation in the form of a computer, a robot, a 3D printer, which ultimately takes the place of the "human robot" and sets free the "creative man," an individual whose renewing field of activity is embedded in networks of collaborations comprised of creators like himself. In other words, humanization is the force that drives the collapse of the pyramid as well as the network's development.

The big question is whether and how will the transition between the two paradigms be successful for the majority of humankind, and how will it not result in an increase instead of a reduction in social disparities.

A POSSIBLE ANSWER FOR THE TSUNAMI

After examining the structure of pyramids and networks, we now can revisit Lanier's and Diamandis' prophecies. Both scenarios (the destruction and the abundance) are plausible, and the choice between the two is in our hands.

As Jaron Lanier, I believe that the Tsunami will forcefully strike all the pyramid's workers – as we are living in the era of the "collapsing pyramids." However, at the same time, we have the answer – the emergence of network-based organizations.

These types of organizations are not only "Tsunami proof" (simply because robots cannot replace the force of human creativity), the network-based organizations know how to utilize the new ideas that develop around the Information Wave in such way that would enable us to surf these waves and reach new horizons of abundance for mankind.

What we must do today is to allow individuals and groups to build network-based organizations? At the same time, if the old

pyramid organizations wish to continue living, they, too, must start developing networks inside and all around the organization.

THE EDUCATION SYSTEM IS THE "KEY."

To amplify the rate in which networks are created, the education system must change its course – it must cease to prepare its students to life in collapsing pyramids, and instead start preparing them to life in the new era, the knowledge era.

The best way to accomplish this is by working in the network paradigm. Just as in the past, when the education system that had prepared its students for life in the industrial wave was built in a "pyramid" paradigm, to enable the students to practice living in the world they will meet outside the school's fence; the new schools and the new education system must employ the network paradigm to prepare its students for life in today's world and in the future.

The Challenge – How will the new education system – that works according to the network paradigm – look like? These days, education people and education organizations around the world are generating numerous answers, which will increasingly expand and grow in number. The media, which is becoming simpler and accessible to all, creates networks of innovative global educators who generate, right here and right before our eyes, new educational models in the network paradigm.

In the next chapter, I will attempt to illustrate what form these solutions take these days – in the classroom, in school, in the city, in the state, and in the world.

In the classroom – A shift from a classroom to a learning community. In the old pyramid classroom, the teacher's starting point was that schoolchildren enter the classroom empty/hollow, and the main question was with what to fill them up and how to do so. The network classroom has a new starting point, according to which, schoolchildren are on a quest for discovering their unique "color," and therefore they bring with them to the classroom a rainbow of

various colors. When faced with this starting point, the classroom transforms into a creativity team, in which teachers and schoolchildren set out on a shared journey of exploration. In this journey, they tackle, hand in hand, challenges in various areas of knowledge, challenges that are relevant to the world in which we live today.

The roles of the teacher and schoolchildren are also changing from a model of one teacher and a group of schoolchildren. The class room transforms into a learning community in which everyone is both a teacher and a student.

Various teams comprised of schoolchildren, teachers, and community experts, work together in the classroom on shared challenges.

The teacher's role is to support the development of a learning and creating community, in which the individual is appreciated, and creation is shared, and to help each and every schoolchild to find his/her unique "right place" and to see the "right place" of his/her classmates.

Every schoolchild specializes in his/her area of strength by utilizing the vast sources that are available to him/her.

In the creativity team (The network classroom), peer-assisted learning takes place (the most profound type of learning). Peer-assisted learning utilizes the student's diverse areas of strength. There are various models within network learning. One of them is a unique model that we have developed in Israel by Education Cities – *The Education Team*.

The Education Team works like a sports team and follows two principles only – Every student is also a teacher – the teacher in his new role as the Education Team's Coach is striving to assist every schoolchild in finding his/her area of strength. The school child becomes a "young teacher" in this area of strength.

The classroom has a measurable shared challenge. – The challenge may be academic, social or community-based, the innovation is that the challenge is shared to the entire classroom rather than being an individual challenge. For instance, in an academic challenge, the group's grade is the average score of all the individual grades of the group's participants. The entire classroom takes part in the gen-

eration and implementation of ideas for improving the classroom's grade by peer-assisted learning and by utilization areas of strength.

After nearly three years of operating the program, during which we have developed methodologies for classroom work, we are witnessing a great deal of success in every dimension. *The Education Team Model* successfully interweaves academic achievements with fun in learning. And where we have previously witnessed rivalry and competitiveness, we now see Arvut Haddadit (Hebrew term for "mutual responsibility").

In school – A shift from education professionals who work as individuals, to education teams that lead a learning community

In the pyramid school – The system's starting point is that the teacher is "hollow," and therefore the system is preoccupied with instructing the teacher what he/she needs to do while narrowing down the teacher's judgment in outlining the study program and predominantly in time management. The teacher is a "lone ranger" who attempts to be successful in his/her main educational task – to "transfer" study materials in the classroom.

In the network school – The teachers are the leaders who lead the creation of a school-wide learning community. The network school works as an "Educational-Communal Greenhouse" that enables teachers to find and express their unique color, and also, to find their "right place" in school.

In the first step – Teachers are encouraged and supported in initiating projects that fascinate them.

In the second step – Networks of teachers begin to form. These networks work in cooperation and lead learning and communal initiatives in school.

In the third step – Schoolchildren and their parents are encouraged to take part in leading and developing the initiatives.

In the City – When the entire city transforms into one big school

In a pyramid city – most of the organizations are in competition with other similar organizations on the one hand and alien-

ate themselves from different organizations on the other. The old school perceives other schools that are active in the city as competitors/opponents in the race for limited resources, and every other organization in the city is “invisible” to it.

In a network city – the underlying idea is to build collaborations among the city’s educational organizations as well as with other organizations that are active in the city. These collaborations are intended to create “networks of “similar,” teachers, school-children, and heads of teachers, hand in hand with “networks of “dissimilar” which focus on a shared challenge. When these networks form, we witness the emergence of an *Education City* -

An Education City perceives the education system as an essential tool in a citywide development, and the city as an essential tool in the education system’s development.

The city as one big school – an Education City is an educational, social network focused on the realization and development of the individual and the municipality via individual, community and municipal areas of strength and growth.

Local Narrative and Local Language – An Education City develops a local “narrative,” a local “language,” and a local way of life that are based on local areas of strength and leverage future avenues of development.

In the State – Cities sustaining collaborations. In the pyramid paradigm, every city works independently and perceives other cities as its competitors. In contrast, according to the network approach, a sense of mutual responsibility and trust forms between the different cities, and different collaborations form, the type of which enables each city to express its unique color. The work with other cities facilitates the development of networks of “agents of educational breakthroughs,” who often feel isolated in their source communities, and who are now connecting with nationwide networks of learning and support.

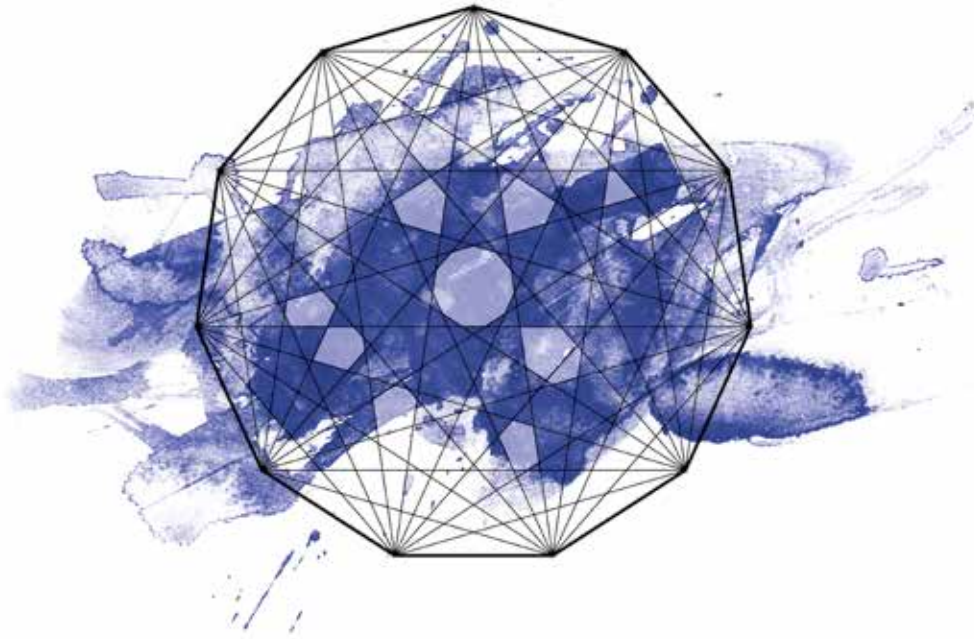
In the World – Global collaborations are woven – Learning Globally & Working Locally. Everything that transpires in class-

rooms, schools, cities, and states, will shape the future of our world. The DNA of collaboration and mutual responsibility works equally well in a game between two six-year-old kids as it does in regional collaboration between two countries. Accordingly, the network approach, which advocates the promotion of the organizational goals concurrently with the acknowledgment of the individual, is too, translated globally to worldwide collaborations hand in hand with the acknowledgment and appreciation of the local way of life and with sustaining the uniqueness of every people and region. Global collaborations enable teachers, from all over the world, to feel that they are vital partners in the development of the new network-based education, an education which is said to lead.

The following parable encapsulates the required change in education systems around the world: Many of these projects could be on more than one of these axes, just as hundreds of other projects could be in this book. It is an invitation to us to learn more about these initiatives, to create new projects that connect and spread other ways of educating and seeking our day to day values that we wish to share in the present and to transmit them to future generations!

INSPIRING EXPERIENCES

Tathyana Gouvêa



The invitation to the authors of this book was to write about the

future of education. But both in their articles as it is for us organizers of this project, it is very clear that these visions and concepts are already a reality for many projects in different parts of the world.

Some mappings, such the ones from Alternative Education Networks like on REEVO, or specific associations such as the Democratic Schools, Waldorf Schools, Montessori, Freinet, among others, are examples of these practices.

For this glossary, we used the InnoveEdu mapping, conducted by Porvir of the Inspirare Institute in partnership with the Edsurge, Innovation Unit and the World Innovation Summit for Education (WISE), of the Qatar Foundation. In this platform (<http://innoveedu.org/>) are listed 96 experiences around the world, whose images and contents are under Creative Commons license. In this glossary we will present some of them from another perspective, illustrating the concepts that were brought along the texts of the invited authors.

To synthesize, we seek to systematize what the various authors presented in a more detailed and rich way, often using different names for similar or related concepts.

The conclusion we reached was that the means are diverse to reach common goals. Throughout the book both the matters of who are the educators of this education of the future as well as

the use of the technology supporting this paradigm change are very present, especially emphasized networking and collaborative work. But here, what we will try to show is that most parts of the authors revealed to us is that the objectives of the education of the future could be summarized in three main axes: belonging, expressing oneself in the world and creating a project of common life. The intention of this last chapter is, therefore, to present experiences that are already happening around the world that show us possible ways to reach these objectives.

We hope to illustrate this work, inspiring the reader to see that the future of education is not far away, but it is right there, waiting for each one of us to claim it and to make the reality we desire from our dreams.

BELONGING

Creation of educational territories | integration of family and society into learning practices | varied knowledge created by diverse sources

Both concepts discussed and projects presented by the authors reveal the importance of children, young people and adults feeling they belong to the space and the project they are part of, creating a sense of belonging is something profound that requires intense levels of participation and integration among the various subjects that build that setting. Some concepts that appear in the texts that show this idea are those of territory, a community of learning and integration of families and communities. We could also highlight the projects that rethink the contents of learning, giving meaning and value to different types of knowledge from different sources. The identity of the students is also building from these relations, acknowledging the value of the place and culture to which they belong, but also expanding its horizon of knowledge and possibilities. The following projects may be examples of some of these actions:

MARIA DO SOCORRO R. DE CASTRO MUNICIPAL SCHOOL Ouricuri City Hall (PE) – Brasil



The school was created in 2000, and since 2004, it has been using real-life aspects of the region to encourage students to continue their studies and to remain motivated and interested. Subjects such as Portuguese, Mathematics, and Sciences are contextualized with debates on issues that affect the lives of the students, such as agriculture, preserving the environment and the use of water. The methodology is based on contextualized education, which takes into account the real-life scenario of the students and places value on differences and native knowledge that has been passed down from parents and the community to children. The school uses informal education practices, such as standing underneath a tree to explain its importance, as well as formal education, with its workload and documentation. Also, family members of the students and the community participate in school activities. The local community, which contains 42 families (approximately 250 people in total) benefits directly and indirectly from the projects carried out at the school. The students' reading and writing skills have improved. Family and community members visit the school and value the work it does about their children's learning. The students have

even brought discussions from school into their home life, which led to the decision to stop using pesticides on some plantations.

UFPR LITORAL (COASTAL FEDERAL UNIVERSITY OF PARANÁ) UFPR and Paraná government – Brasil



The University, which is located in Matinhos, on the coast of the state of Paraná, aims to counteract problems that students in the region face, such as poverty, resignation, social exclusion and the difficulty of supporting oneself on a traditional university course. To do this, the institution, which was created through a partnership between the Federal, State and Municipal governments of the region, which includes the Vale do Ribeira municipality, in the state of São Paulo, uses an interdisciplinary teaching method where rigid disciplines and courses do not exist. The 14 undergraduate courses that are offered were developed according to the needs of the local community, and include management and entrepreneurship, tourism management, agroecology, agricultural education and public health. There is also a Master's course on sustainable territorial development and specialization courses that are mainly geared towards educators. There are three major learning axes: practical theoretical fun- damen-

tals, learning projects, which are prepared from the start in order to develop capabilities in the areas of self-organization and productivity, and cultural and humanistic interactions, as well as activities that are conducted to encourage interaction amongst students, professionals and the community that emphasize local knowledge and social life. Students are also encouraged to participate in institutional and personal projects. In addition to having classes about professional fields that they are interested in. Students also participate in interactive lessons and develop learning projects from their first year in the course. The university acts as an institution that is committed to collective interests. The participation of the community promotes social mobilization and the possibility that the community appropriates the University for itself alongside the teachers.

PROJECT OF EDUCATION FOR CIUTAT VELLA Barcelona City Hall, Government of Catalunya and community organizations – Spain



Barcelona is known for being the first city in the world to declare itself an “Educating City,” investing in public spaces and in the linking of different sectors to ensure holistic education for children and adolescents. In 1990, the first International Congress of Educating Cities was held in the city. In recent years, the Ciutat

Vella district, in the central region, has become one of the clearest examples of educational territory in the city after educational institutions, from both the public and the private sector, began to discuss how they could overcome social inequalities, school dropout rates and safeguard the diversity of the region, ensuring an education that reflects local characteristics, marked by the presence of different ethnic groups and rich architectural heritage. The region comprises five districts, with around 105,000 inhabitants of 122 nationalities – 9,5% of them aged between 15 and 24 years – 49 schools and more than 200 cultural institutions. Students began to occupy more and more public space, using it for learning. Parental involvement in the school's pedagogical decisions increased. There exists a deep link between spaces and people. Educational policies began to operate in constant dialogue with the region. State policies ensure long-term programs. The tertiary sector also participates intensely, though without acting as a form of welfare. Urban development is beginning to be designed by the needs of education, and the number of school dropouts has decreased.

HIGH TECH HIGH

High Tech High Foundation – USA



The network of charter schools began in 2000 in San Diego, USA. Created through the participation of local business people, the group seeks to avoid the pitfalls of the traditional school structure, such as standardized classes, fixed, classroom-based classes, and a lack of interest from students and teachers. Today, the group has 12 schools and a post-graduate teaching institution for teachers. With teaching methods inspired by the constructivism of Paulo Freire, the objective of this network of schools is based on the four pillars of 21st Century Education: personalization, connection with the world, a common interest in learning and teachers acting as learning designers. Teachers guide students in a project-based learning methodology. Instead of strict disciplines, the content is grouped into themes and approached through the resolution of specific problems, based on the reality and interests of students. The idea is that the learning process is a true reflection of the individual's life, but schools also provide collective moments where students can gather in groups, meetings and present their work.

EXPRESSING ONESELF IN THE WORLD

Play | create | enterprising | moving around and expressing oneself through diverse means | being a protagonist

Throughout the book we have whole texts that emphasize the importance of children and young people playing, creating and being protagonists of their lives. Based on the sense of belonging already presented, expressing oneself in the world reveals the authorship and autonomy of the student facing the world presented to him/her and which he/she is part of. Regardless of age, the subject is endowed with culture and expresses its subjectivity through it, as well through the creative ways of uniquely and singularly relating the cultural elements that constitute them and connect them to the world. There are several languages one can use to express oneself: the young ones through play, the older ones through

artistic and corporal works, but also creating solutions through the work itself for the different contexts to which it belongs, hence being called protagonists, entrepreneurs, activists or agents of transformation. Here are some projects that illustrate these concepts:

TUTORIAL LEARNING SYSTEM

Fabretto - Nicaragua



The Tutorial Learning System (SAT), which began in 2007, is an innovative rural education program, which provides specific learning opportunities for rural populations. The non-formal education model, recognized by the Ministry of Education, provides access to education for rural young people and adults in their communities. It allows them to study while continuing their agricultural activities and earning a living. The methodology is based on learning by doing, with the use of educational resources that integrate theory and practice. Teachers are trained to act as tutors, working with the content of the school curriculum and of rural life, such as agricultural practices and leadership skills, in a multi-disciplinary way. While studying, students work on plantations or create business plans to sell their produce.

Since the implementation of the project, at least 12 companies created and operated by students are already in operation. In 2013, 40 tutors were trained, 754 students enrolled in the program, and 115 students started income-generating initiatives to support their families and increase rural economic development. The project reaches 40 needy communities. The 2012 Tinker Foundation/UPenn study, showed that 100% of graduates of the program were employed. According to the survey, graduates displayed values, ethics, and civic engagement. By 2013, more than 9,000kg of fruit and vegetables had already been sold to school lunch programs in the regions served by the project.

NORTHERN BEACHES CHRISTIAN SCHOOL Northern Beaches Christian School - Australia



This institute, which is a non-profit organization is run with government funding and enrollment fees, was established in 1981. In 1984, it was moved to its current campus, in Terrey Hills, in Sydney, Australia, where it offers classes for students from kindergarten to high school. In 2005, the school created the Sydney Centre for Innovation in Learning (SCIL) for the development of innovative methods of education. Students are the authors of their own educational

journey, co-creating their learning process with the teachers, who act as mentors, specialists, and guides. The school focuses on critical thinking and on practical, collaborative learning that is based on projects. The aim is to mold young adults that have the qualities of leadership and creativity. Technology is at the forefront of this method of teaching. Students can use their laptops at school and have access to online resources that enrich their studies. The school offers activities to the students that it refers to as “opportunities.” There is also a program in which students visit disenfranchised neighborhoods in countries like Cambodia, Rwanda, and Uganda, wherein students can participate in various types of sports, such as swimming, athletics, and gymnastics, as well as extracurricular activities, such as music and acting, and are immersed in areas they may be interested in, such as equestrian and diving.

EXPERIMENTAL SCHOOLS

Experimental Schools - Argentina



Experimental, a network of 38 schools that adopts the democratic education methodology, aims to challenge the current tra-

ditional education system. Teaching is personalized and collaborative and based around the visual arts and music. The teaching method follows the precepts of the pedagogy of tolerance, created by the educator and philosopher Paulo Freire, in which education is a process that is continually under construction, with teachers and students teaching and learning together. The pedagogical proposal was first put into practice in 1958, with classes taking place in the home of one of only three teachers. The first public school, the Roberto Themis Speroni Institute of Higher Education, was established in 1984. There are no tests, and student assessment is based on work produced in class. Music, poetry, and theater are also used to talk about issues linked to regional traditions, and the musical instruments are available to students for use at home. Every day teachers gather for two hours at the end of their classes to talk about the students and the activities they used, and to plan the next day. Decisions are made jointly.

KAOSPILOTS

Kaospilots - Denmark

Kaospilot is an institution that seeks to see the complete human being, including their strengths, weaknesses, dreams and backgrounds. To do this, it seeks to continuously discover what motivates people to learn, create and lead. It does this by providing an environment that helps students to respect their values and follow their dreams in a chaotic world that needs to be transformed. The Creative Business School was founded in 1991 by Uffe Elbaek in Denmark's second largest city Aarhus. It proposes a training period of three years, during which time the students, most of whom are 24 years old, become professional protagonists of their own learning.

Case studies are completely replaced by real projects with real clients. The curriculum comes to life through these projects and the student's personal reflections on the practices involved. During their training, students experience a great personal development. The ob-

jective is that when they complete the three years of the course, they will know who they are and how they can use their skills in the best possible way to make a positive contribution to the world. One-third of the school's graduates set up their own business, NGO or project.



CREATING A LIFE PROJECT IN COMMUNION

Thinking and acting for the common good | sustainability | empathy | self-responsibility | sharing

Understanding the subject as part of a whole, and that this subject both receives from and acts in this environment - from the youngest age, through cultural expressions - we highlight from the work presented throughout the book a guiding principle of this human-world relationship: the creation of common purpose. Both the sense of belonging and its protagonism in the construction of reality arises the demand to work for the common good. Concepts such as empathy, sustainability, self-responsibility or even collaboration, group work, sharing, and networking are ways of nurturing respect for oneself, one's neighbor and the planet, all of them being parts of equal importance for life. The projects below are some examples of work from this perspective:

GREEN SCHOOL Green School - Indonesia



Known as the greenest school in the world, the Green School was founded in 2008. The international school is located in the middle of the forest and seeks to integrate traditional academic content with environmental and experiential learning, based on sustainable practices and focused on personalized learning practices. While the school has students from at least 25 countries, at least 20% of pupils must be children from the island itself, who receive a scholarship. Teachers are also from different parts of the world.

The spiral shaped buildings are built from bamboo, and the school has no walls. Solar panels generate 80% of electricity. The school uses compost toilets and waste is recycled or used as compost. The campus has organic gardens and livestock such as a cow, a buffalo, and pigs. The food is made by cooks from the local community in stoves and hand-crafted ovens, with products from the school and the local area. The rooms have natural light and ventilation.

The development of skills such as literacy, mathematics, physical education, arts, science and technology, design and research takes place in parallel with values such as integrity, empathy and trust, and positive attitudes, such as persistence, positivity and passion, and good habits, such as organization, creative and critical thinking and collaboration. The school adopts the model of progressive education and seeks to help students to achieve inner and social awareness. Reflections on the past are used to guide the future, focusing on environmental protection and the creation of a more ecologically and socially just world.

SCHUMACHER COLLEGE Dartington Hall Trust – United Kingdom



The institution combats severe problems of current society, such as individualism, consumerism, the lack of respect for others and poor eating habits. They do this by exercising the sense of collective and promoting the sustainability of school spaces and the courses they offer. The college offers postgraduate courses, with

150 students, in areas such as holistic sciences, ecological supply systems, and the economy, as well as short-term courses, which can last for three or four days to six months. The house where participants live is administered and cared for by all (students, staff, collaborators), who begin their day with a meeting. Next, they divide into cooking, gardening and cleaning groups. The food is vegetarian, some of which is produced in the local garden. The rest comes from local organic producers. Students study in the morning and have the afternoon free for reflection. All of the courses have small groups so that the students receive more attention from the teachers, many of which are worldwide specialists and activists. There is also time to make use of the library, which contains a special collection of books on sustainability and ecology. A mediation room is available.

At night, visiting teachers, artists and guests often give speeches. Socializing usually occurs in the living room or bar. The idea behind this project is that learning and living together transform the participants. Creativity and emotional flexibility are encouraged throughout the stay at the college. The participants learn concepts such as collaboration, compassion and sharing. They begin to question how they live in current society, as well as their consumption habits and relationships. They leave the course with the ability to make positive changes in their lives and the lives of those around them and around the world. The school has already received participants from 60 countries.

ST PAUL'S SCHOOL St Paul's School - Australia

The pedagogical practices of the school are developed according to the needs of its students, who are encouraged to be autonomous, apply knowledge acquired in the real world, and learn through their personal interests and passions. Another project, Independent Studies Time, lets them create learning projects on

a topic related to arts or technology, choose teachers who will be their mentors, and allocate resources and space needed for the project. They will also participate in social projects, such as activities in needy communities. The construction of learning through the acquiring of skills such as creativity, empathy, entrepreneurship, resilience, persistence and collaboration, takes place by adapting studies to the student's needs, through the application of indicators that determine the direction, pace and skill level reached. A professional preparation program also deals with issues such as self-awareness, seeking opportunities, decision making and the transition between school and employment.



SUSTAINABILITY INSTITUTE

Sustainability Institute – South Africa



The organization combats problems such as the lack of social equity and the destruction of the ecosystem. It also aims to reduce and eventually eradicate poverty. The Institute is a center of housing and learning in the area of sustainable development. It was founded in 1999 by Eve Annecke and Mark Swilling in a community known as Lynedoch EcoVillage, around the university campus in Stellenbosch, South Africa. The Lynedoch EcoVillage, of which the institute is a part, is a place of learning for ecological practices, such as the use of renewable energy and organic agriculture, with a school and a crèche available for workers in the region. The institute also manages an organic farm, which is used as a teaching space for the sustainable agriculture courses.

ABOUT VOLUNTEER AUTHORS AND TRANSLATORS

ORGANIZERS

PHILIPPE GREIER

Philippe is founder of the foundation presente! and initiator of several successful prototypes and solutions for transforming education in collaborative and self-organized ways.

A professional hippie who envisions a future built upon tolerance and conscious choices. What triggers him is discovering and experimenting new realities and ways to live together and to collaborate in safe and abundant communities. Philippe's focus right now is to bring different movements together in the transformation of education (www.EDUshifts.world) and to co-created a peer 2 peer community learning platform (www.blosm.io).

TATHYANA GOUVÊA

Tathyana is an educator and entrepreneur. She received a Master in School Management and a PhD in Educational Innovation. She is also a founder of Projeto Educação, a research and consulting company for transformative education projects. She is passionate about what she does and dreams of a better world for everyone. In this book she acted as idealizer, coordinator, author and translator. tathyana.gouvea@gmail.com / www.projetoeducacao.pro.br



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Bayo is a clinical psychologist, lecturer and author from Covenant University in Nigeria. He is an international speaker, poet and activist for a radical paradigm shift in consciousness and current ways of living. He is Coordinator of the International Alliance for Localization. His is an emerging voice in the world calling for a multi-dimensional shift in consciousness and systemic reification by turning to each other in small ways, and reconnecting with our 'shamanic effusiveness and utter magnificence'.

AXINIA SAMOILOVA

Axinia is a Russian born, Austria-based educational visionary with a passion for the universal approach to pedagogy. She is currently writing a book, with a universal perspective on the history and future of world education entitled "It's time for World Pedagogy". Axinia is founding an alternative school with the purpose of uniting and imbibing the world's best learning practices in order to set up an inspiring exemplar of enlightened schooling.

FLÁVIO BASSI

Flávio Bassi is an anthropologist, biologist and non-formal educator with 15 years of experience in the social sector in Brazil and internationally. He was founder and executive director of the NGO Ocareté, which acts in the social-environmental field with indigenous communities, regional director of Ashoka in Southern Africa and currently leads Ashoka's Empathy and Changemaker Schools Program in Latin America. In 2012 he was awarded "Europe-Africa Young Leader" by BMW Stiftung and in 2013 received the "Top 35 Under 35 Young Foreigners Making an Impact in Africa" by Young People in International Affairs (YPIA)

FLOR DILLON

Flor is from the University Viva Inkiri and leaves in the ecovillage in Piracanga.

FLORIS KOOT

Floris is one of the co-founders behind Knowmads Business School, a young alternative start up education space focussing on educating changemakers. He is an educational visionary, inventing new approaches to learning through play and changing paradigms. Before that he explored a lifetime of experience in all kinds of creative professions and learned to embrace new paradigms that challenged his outlook to conventional education. During his journey he explored creative capabilities in management role playing games (Bouwfonds, Bank of Scotland, Shell, KPMG, Sogeti, De Baak) and festivals (NNE, Open UP). He played the Corporate Fool (Foolservice) and designed and hosted trainings and events all around the world.

GALORIAN

The author with the Banana Smile. Galorian is an author, speaker, and international advisor on creative education to public institutions, non-profits and cultural institutions.

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Gerald is Professor of Neurobiology and Head of the Center for Neurobiological Prevention Research at the University of Göttingen (Psychiatric Clinic) and the Institute of Public Health (University of Mannheim). His specialization is the influence of early experiences on the brain development, effects of anxiety and stress and importance of emotional reactions. Gerald is the author of numerous scientific publications and popular scientific articles. He is founder of the education transformation movement of teachers and students "Schule im Aufbruch" and board of the Academy for Potential Development.

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Helena Singer holds a PhD in Sociology from the University of São Paulo (USP), with a postdoctoral degree in Education from the State University of Campinas (Unicamp). She was the director of the Apprentice City School Association and the author of *Puzzled Speeches: lynchings, Punishments and Human Rights* (Humanitas, 2003 - CES Award for Young Social Scientist in Portuguese Language) among other books and articles on education and human rights. She has always been dedicated to the themes of democracy and social innovation, with most of my projects focuses on the field of education.

JOSÉ PACHECO

José is a Portuguese educator who pioneered a school called Escola da Ponte (Bridge School), in Vila das Aves, Portugal. In May 2004 he was awarded by the President of Portugal Jorge Sampaio with the Ordem da Instrução Pública, which is one of the honorific orders of Portugal. This is the attribution of decoration to individuals personal bravery, achievement, or service to Portugal. He has been living in Brazil for the last ten years, attracted by the bigger innovative movement in the area of education and schooling. He is also a published writer, with some books and a wide range of articles.

KŪ KAHAKALAU

Kū is a native Hawaiian educator, researcher, song-writer, and expert in Hawaiian language, history and culture. After decades of creating and testing Hawaiian-focused models of education, Kū is creating a Hawaiian system of education that is culturally-driven, family-oriented, place-based and sustainable.

MANISH JAIN

Manish is Co-Founder of Shikshantar: The Peoples' Institute for Rethinking Education and Development and of the Swaraj University, Creativity Adda, Learning Societies Unconference, Walkouts-Walkon network, and Udaipur as a Learning City in India. He helped to launch the Ecoversities Network.

Prior to this, Manish worked for the UNESCO Learning Without Frontiers global initiative and has been a consultant to UNICEF, World Bank, USAID in Africa, South Asia and former Soviet Union. Manish also worked as an investment banker with Morgan Stanley. He has been trying to unlearn his Master's degree in Education from Harvard University and a B.A. in Economics, International Development and Political Philosophy from Brown University. He and his wife Vidhi have been unschooling themselves with their daughter, Kanku. Manish has edited several books on themes such as learning societies, unlearning, gift culture, community media, and tools for deep dialogue.

PHILIPP MÄNTELE

Philipp is the co-founder of the Social Innovation Academy. He is passionate about Social Entrepreneurship and after being trained as an electrical engineer he decided to take on a Master study in vocational education and design.

THEREZITA PAGANI

Therezita is a charismatic educator and creator of the school Te-Arte. The Te-Arte has been around since 1975 and is distinguished by not having a classroom and by its playful and artistic method. It is located in São Paulo (Brazil) and it serves 80 children and their families.

THOMAS HEIDE

Thomas Heide is a Danish philosopher (BA), educational philosopher (MA), author, designer of philosophical objects and educational entrepreneur. Thomas is co-founder of the Kaospilot school, prize winning singer/songwriter and source to the equation of change experience. His work is available for free at www.byebyespacetime.com
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TIÃO ROCHA

Tião is a Brazilian educator, anthropologist and folklorist. He is the author of cultural and community development books and a member of several organizations promoting cultural initiatives in his community.

Tião is Founder and President of the Popular Center for Culture and Development (CPCD) a non-governmental non-profit organization, established in 1984, in Belo Horizonte. He created CPCD to promote informal education and community development through culture, reciprocal learning, play, games, mobile libraries, theatre and music. He and CPDC engage in new challenges, building “educational cities” and “sustainable cities” in Brazil, South America and Africa.

Tiao Rocha has been a Brazilian Social Entrepreneur (Schwab Foundation) since 2007.

YAACOV HECHT

Yaacov is an internationally distinguished leader and visionary in democratic education, learning theory, and societal change. In 2005, “The Marker” – Israel’s largest economic magazine – named Hecht one of the 10 most influential people in the social and educational areas in Israel.

He convened the first International Democratic Education Conference (IDEC); an annual conference that continues to connect educators, schools, and organizations and founded the Institute

for Democratic Education in Israel (IDE), which focuses on making change in the public schools system through democratic education principals. In 2010 Yaacov co-founded “Education Cities - the Art of Collaborations,” an organization which focuses on turning educational systems into a central growth instrument for cities.

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Julija, Schneider, one of the translators of this article is a convinced Whorfianist and therefore, strongly believes that language is not a mere form of expression of a culture's thoughts and ideas, but is in itself a means that moulds these thoughts and ideas in the first place

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Natasha Nakamura Cordeiro is a Brazilian Internationalist studying Pedagogy. Assistant teacher in a socio-constructivist school and mediator in social and collaborative projects. She lived in China and New York. Enthusiast in life and Education as a tool for empowerment and social transformation.

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PEDRO BARRERA

Pedro Barrera is interested in history, psychology, anthropology, sociology and languages; Listen to Metallica, Loreena Mckennitt and Dead can Dance; Reads Murakami, Tolkien and Hesse; Assists Battlestar Galactica, Gladiator and Matrix; And one day he will finish writing his medieval epic fantasy. He is also a jurist and public servant in Paraná-Brazil.

PENELOPE VALENTE

Penelope Valente born in Sao Paulo/Brazil, have bachelor degree in Biology Science and in Advertising. Works as a translator, teacher and with publicity. Living with her cat, she is passionate about discovering new places and languages, getting to know cultures, smells and different landscapes

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Roger Lai has a degree in International Relations at USP. He has accumulated several experiences in the third sector, through which he has become interested in Pedagogy, Psychology and collaborative methodologies. As an internationalist, he worked alongside social movements of America and other continents in the Secretariat of ALBA Movements, helping them carry out joint actions to common struggles. He was an educator in the preparatory school of Núcleo de Consciência Negra and now serves as an educator again, but giving English lessons. Also, he aspires to be a photographer and is one of the co-founders of the blog “Outra Coluna”, that fosters discussions about asian identity in Brazil and its intersections with race, gender, sexuality and class. He believes the world can change through the decolonization of our bodies and minds. rogerlairi9@gmail.com

SIMONE MITIE TANIMARU

I was born in São Roque-SP, I grew up in Ibiúna-SP (“lettuce city”), however for one year and a half I lived in Japan where my parents went to work as dekasegi. I moved to Sorocaba-SP to major Industrial Engineering at UFSCar. During my graduation time, I participate in several projects, such as: AIESEC, voluntary teacher in a school to prepare low-income students for entrance exams, Financial Market Club and an exchange program for 1 year in the USA with full-scholarship. Today I live in São Paulo-SP and I see Education as an opportunity for social ascension and freedom.

TERESA J. FRITH

Teresa is a retired US Navy Chief Petty Officer who was a journalist/writer and editor in her job in the Navy. She retired from the Navy in 2011 and is now a Freelancer. She holds a Bachelor’s degree in English from Western Illinois Univer sity. She was born in Washington D.C and now lives with her husband, Arthur, in Nashville, Michigan.

NOTES

Philippe Greier

- 1 What is civilization? You could argue is nothing more than how much a society or culture ranks compared to the ruling paradigms, values and norms of the ranking society. Industrial societies with the most technological advance proclaim themselves the pinnacle of civilization. The sum of wealth, technological advancements and personal freedom was seen as the proof of this claim. In fact the claim was based on the amount of power they had over all other cultures, blind to the wisdom they held within.
- 2 <http://www.salon.com/2017/04/30/its-the-end-of-the-world-and-we-know-it-scientists-in-many-disciplines-see-apocalypse-soon/>
- 3 <https://www.theguardian.com/commentisfree/2016/dec/01/stephen-hawking-dangerous-time-planet-inequality>
- 4 Is Finland really the example for a successful education or is it the best example for the optimization of a broken system?
- 5 Since I am talking to the people of the 21st century I would like to emphasize that talking to my peers in 2184 nobody understands the concept of degrees or certification. Our talents, skills and experiences are transparent to the whole society and the community is collectively taking care of your development and helps to apply your talents in the process of materializing thoughts and realities.
- 6 Compare Philippe Greier about Edu on Tour in the book Caindo no Brasil
- 7 See note Nr 5
- 8 There are strong movements around alternative schools also in countries like Germany (Schule im Aufbruch) or Israel (Education Cities). There they are more linked to the education system and are often not seen by the general public or part of the discussion of the transformation.
- 9 https://www.nytimes.com/2015/12/16/opinion/brazils-students-occupy-their-schools-to-save-them.html?_r=1
- 10 <https://www.facebook.com/notes/lilian-labbate-kelian/occupy-schools-students-in-s%C3%A3o-paulo-demanding-a-role-in-improving-education/1088740951166037/>
- 11 Read Ilkka Kakko's analysis of the Post Truth Era and its consequences about the organizations of our time. <https://www.slideshare.net/ilkkakakko/new-book-ilkka-kakko-oasis-way-and-the-postnormal-era-how-understanding-serendipity-will-lead-you-to-success>

12 Further reading: <https://charleseisenstein.net/essays/institutes-for-technologies-of-reunion/>

13 Compare Philippe Greier about Edu on Tour in the book *Caio no Brasil*
<https://www.theguardian.com/books/2015/jul/17/postcapitalism-end-of-capitalism-begun>

15 <http://www.kurzweilai.net/the-law-of-accelerating-returns>

16 <http://www.salon.com/2017/04/30/its-the-end-of-the-world-and-we-know-it-scientists-in-many-disciplines-see-apocalypse-soon/>

Adebayo Akomolafe | Manish Jain

17 <http://citypress.news24.com/News/education-in-south-africa-a-system-in-crisis-20160531>

18 http://www.indiawest.com/news/global_indian/india-s-education-crisis-more-than-half-of-th-graders/article_81d46666-43ee-5066-84fo-6fo754e16af2.html

Axinia Samoilova

19 Due to some specifics of the Russian educational tradition when I use the term “upbringing by teachers/educators”, which seems to be one of its core principles, I am referring to the efforts and involvement of a teacher into the overall upbringing of a child. In the Western tradition upbringing is usually perceived as the responsibility of the child’s family. In Russian culture, “upbringing” is understood to be a collective task, so the role of a teacher or educator in the upbringing of children is significant. Until 1990, upbringing, along with teaching, was carried out as an official task of educators in the Soviet Union. Later in the article the term “upbringing” refers to raising a good human being and model citizen, by “educating” i.e. actually teaching a subject, or upbringing and teaching together.

20 http://www.booksite.ru/ancient/reader/spirit_2_01.htm

21 <http://www.ourcivilisation.com/smartboard/shop/smmnsej/tolstoy/chap4.htm>

22 <http://encyclopedia2.thefreedictionary.com/pedagogy>

23 <https://www.beds.ac.uk/jpd/volume-4-issue-2/key-pedagogic-thinkers-anton-makarenko>

24 Gorky 1976:112

25 Moos, 1961

26 Maslow, 1943

27 <http://www.newfoundations.com/GALLERY/Makarenko.html>

28 <http://co-creatingournearth.blogspot.co.at/2014/06/a-new-way-of-educating-our-children.html>

Flávio Bassi

29 We use “skills” by convention and simplification, but we understand that they also comprise a number of related skills. For example, in the Brazilian national curriculum, empathy is defined as a skill, while teamwork is understood as a competence.

30 A selection of these works can be found online on our global “Start Empathy” site: <http://startempathy.org/why/reading-room>.

31 To find out more about our global community of Changemaker Schools, go to: www.ashoka.org/meet-changemaker-schools and for the detailed profiles of the Transforming Schools in Brazil, visit: www.escolatransformadoras.org.br.

Floris Koot

32 Or such as they frame their call to educational innovation, revolution or transformation.

33 For example. In my own ‘free Western’ school where I studied to be a history teacher around 1980, I could find only one Russian version of the Cuban missile crisis. It was in a heroic American book, where after each Russian argument immediately the American counter argument was put down. Only after 2000 I saw a more balanced documentary that showed how the Americans might actually be seen as the losers of the stand-off as they pulled nuclear rockets back from Turkey. Facts now openly published here https://en.wikipedia.org/wiki/Cuban_Missile_Crisis We’ll have to wait, for now, for the balanced real facts on issues like, how far does NSA control reach and in whose interest we are so heavily involved in the war in Syria.

34 <http://www.knowmads.nl/> a small, so far, unfunded International Business school that helps students 20-35 y.o. to turn their dreams into a business, profession or projects with an eye towards the needs of the world around them.

35 Millions of kids support Greenpeace, the WNF, scouting, help collect money for local and global causes, collect posters with worries or calls for change. Yet for how many is this but a phase? I think it should be more than that.

36 With ‘we’ in this text I mean mostly Western oriented educators, and anyone feeling spoken to.

37 Based upon lots of research by academics, cultural habits and lobbyists from various interests groups especially, and understandably, dominating industries in need of enough worker supply. In some countries this also includes heavy government control, up to subtle and not so subtle censorship and propaganda.

- 38 <http://www.forbes.com/sites/drewhansen/2016/02/09/unless-it-changes-capitalism-will-starve-humanity-by-2050/#48832f634a36>, <http://www.greenfacts.org/en/ecosystems/> <http://www.livescience.com/27692-deforestation.html> <http://www.conserve-energy-future.com/causes-and-effects-of-environmental-degradation.php> (this one gets one worried, because the damage is so overwhelming diverse and large scale) <http://www.oecd-ilibrary.org/docserver/download/0111111ec008.pdf?expires=1454431557&id=id&accname=guest&checksum=5BABAFC6376CE0DF4C48D5338D8CA568> (full report by the OECD)
- 39 Read “Swimming with Sharks” book on bankers by Joris Luyendijk <http://www.ft.com/cms/s/0/efd16ff8-56e3-11e5-9846-de406ccb37f2.html>
- 40 <http://www.theguardian.com/education/2010/may/11/ritalin-adhd-drugs>
- 41 <http://www.globaleducationmagazine.com/education-suicide/> A survey done in UK on 6020 students (2002) has shown that 70% of self-harming teenagers with suicidal thoughts have admitted that the cause was their concerns about the school performance and exams. In India about 20 students kill themselves every day due to the stress related to exams, wanting to secure seats in prestigious schools, according to the National Crime Records Bureau.
- 42 stEFFIE (experimental fun festival for innovative education) is a yearly educational conference in Vienna for innovators, pioneers, thinkers within and outside of the system. stEFFIE also addresses new kinds of training in organizations and seeks the dialogue with official education. It’s mostly German language orientated.
- 43 The Blessed Unrest video of 2007 made those millions of people working for change realize they are not alone.
- 44 There’s a protest out of Anxiety (starting with fear: ‘get rid of those foreigners’) and Care (starting with hurt: ‘act humane towards these humans like us’). It’s important to separate the two.
- 45 Some examples of aid gone wrong: <http://matadornetwork.com/change/7-worst-international-aid-ideas/http://oneworld.org/2015/03/17/disastrous-results-of-140m-uk-aid-for-nigerian-energy-privatisation/> <http://www.theguardian.com/commentisfree/2012/dec/30/disastrous-relief-for-haiti> Or this aid to Somalia ending with: “According to Michael W. McLaughlin of Principal MindShare Consulting LLC, we are sold to “solutions we may not need, systems that may not work, at a price we shouldn’t pay, in a language we don’t understand.” <http://www.raxanreeb.com/2014/03/somalia-aid-to-somalia-the-worlds-disastrous-business/>
- 46 How many planets would we actually need to provide for everyone, as we do now? And that number is getting bigger not less. It is unsustainable and our children are already living with the increasing amount of consequences.
- 47 Mix ‘em up, play with overlaps, find interesting combinations between these eight. Approaches. Life is integrated, so should the experiences of students be. It’s in the looking back we may distinguish, if needed.

Helena Singer

- 48 The historical-conceptual reflection on democratic education was made in Singer, 2010
- 49 There is academic work about these experiences . See, for example, Abbonizio, 2013
- 50 The main reference on this movement is the book organized by Jacqueline Moll, written when she was coordinator of the Curriculum Department of the Ministry of Education: Moll, 2012.
- 51 The program “Mais Educação”, carried out since 2008 by the Ministry of Education (MEC), provides resources for extending the school day, for at least 7 hours a day, which do not need to be fulfilled within the school building, but in the spaces available in its environment. The resources come directly to the schools that adhere to the program and are used to organize activities to which students adhere for interest. MEC’s resources are focused on reimbursement of monitors, acquisition of material kits, contracting of small services and obtaining consumer and permanent materials, as well as food. The municipal or state secretaries must provide the community teachers, who are responsible for the organization of the program in each school. The program has, in its structure, Metropolitan or Regional Committees, composed of representatives of the secretariats, school administrators and other partners, including universities, and Local Committees, formed by representatives of the school community and the environment. More information in the Portal of MEC accessed on 30.03.2014 at <http://portal.mec.gov.br/>.
- 52 The work of Paulo Freire is a world reference for the reflection on emancipation in education. His most translated book is Pedagogy of the Oppressed, written in 1968, when the author was exiled in Chile. Prohibited in Brazil, it was only published in the country in 1974. (Freire, 1970).
- 53 Especially the convergence between integral education and educommunication are the publications organized by the Network of Communication, Education and Participation (REDE CEP) in partnership with UNICEF. For example, (Volpi and Palazzo, 2010).
- 54 A good historical review of audiovisual education from the point of view of emancipatory education is found in (Cirello, 2010).
- 55 The recognition that integral education, especially the perspective of educational territories, promotes the agenda of social and environmental sustainability is found in the publication (Rede Nossa São Paulo et al., 2010)
- 56 The human rights perspective as an emancipatory alternative to education is analyzed in (Schilling, 2005)
- 57 The virtual platform of the Reference Center can be accessed by the following address: <http://educacaointegral.org.br/> accessed on 30.03.14

- 58 The content of the Manifesto can be found in this blog, <http://manifestopelaeducacao.blogspot.com.br/> accessed on 30.03.14
- 59 The page is an open Facebook group, <https://facebook.com/groups/redenacionaldeeducacaodemocratica/> accessed on 30.03.14
- 60 Sites with listings and maps of alternative experiences in education are mainly from the International Democratic Network (<http://idennetwork.org> accessed 26.12.14) and Reevo (<http://map.reevo.org/> accessed 30.03.14)
- 61 There are several publications about this organization available on the website <http://cidadeescolaaprendiz.org.br/> accessed on 30.03.2014. General views of its methodology presented by different authors in Portuguese, English and Spanish are in (Alves, 2004); (Medeiros Filho and Galiano, 2005) and (Leadbeater, 2012) inserts it into a worldwide context of innovation in education.
- 62 The characterization of educational territory from the neighborhood perspective was developed by the architect Bia Goulart (Goulart, 2008) and sociologist Iara Xavier (Xavier, in press).

Therezita Pagani

- 63 At Te-Arte, there is always the parent's warning about the child who becomes psychosomatic, and the question is always asked: what is happening with you, the parents?

Yaacov Hecht

- 64 See note below
- 65 Explanation on network and pyramid will be presented later in this article