The following study is the result of the work of educators, writers, entrepreneurs for a humanitarian and functional school of the future

CONCEPT NOTE

THE ROLE OF EMOTIONAL EDUCATION IN THE SCHOOL OF THE FUTURE.

AND FIVE SUGGESTIONS FOR THE SCHOOL OF THE FUTURE

Emotional Education for All

For the Concept Note collaborated: **Argyris Stravelakis Mardas**, Entrepreneur, Creator of Expansion Method, Writer, **Asimina Kontogeorgiou**, Coordinator of the Secondary Education Project, **Catherine Maria Rozi**, Geologist, Secondary school Professor, **Theodora Ghelis**, Chemist Secondary school Professor, **Athanasios Spanias**, Physicist Secondary school Professor, Professor of Art, Photography, **Melissa Selevista**, Businesswoman, Physicist, Audiologist, MSC Student in Acoustics, **Kelly Stavridaki**, MA Creative Arts in Education.

CONTENTS

* 4 D	ISCLAIMER
* 5 EDUC	CATION TODAY
* 6 EMOTIONA	AL EDUCATION
* 10 THE SCOOL O	F THE FUTURE
* 12 1 UNSPECIFIED LEA	ARNING SPACES
* 17	2 NO GRADES
* 22 3 MENTO	ORS-COUCHES
* 27 4 NON LINEA	R EDUCATION
* 32 5 DIFF	FERENT TOOLS
* 35	ROAD MAP
* 37	CONCLUSION
* 38 E	BIBLIOGRAPHY

DISCLAIMER

The following Concept Note "The Role of Emotional Education in the School of the Future and Five Suggestions for the School of the Future", is the result of discussions and lessons from the SciCulture (www.sciculture.eu, Erasmus +) program presented in Athens in April 2019 on "The Education of the Future, the School of 2050". It is based on the different educational systems of the program participants.

For the study collaborated: **Argyris Stravelakis Mardas**, Entrepreneur, Creator of Expansion Method, Writer, **Asimina Kontogeorgiou**, Coordinator of the Secondary Education Project, **Catherine Maria Rozi**, Geologist, Secondary school Professor, **Theodora Ghelis**, Chemist Secondary school Professor, **Athanasios Spanias**, Physicist Secondary school Professor, Professor of Art, Photography, **Melissa Selevista**, Businesswoman, Physicist, Audiologist, MSC Student in Acoustics, **Kelly Stavridaki**, MA Creative Arts in Education.

SciCulture Participants: Kyriaki - Maria Karaggeli | Christopher Zerafa | Xiyuan Zhang | Lars Jonsson | Abigail Galea | Laura Gaiger | Can Feng | Matthew Cilia | Elli Pavlaki | Luke Graham | Hannah Nyberg | Aroa Gregori Montaner | Minou Schillings | Brandon Tuck | Chryssa Sgouridou | Dale Rothenberg and the Authors.

Speakers: Edward Duca | Daniela Quacinella | Adrià Julià | Nika Levikov | Kerry Chappell | Lindsay Hetherington | Menelaos Sotiriou | Maarten van der Sanden

The European Commission's and SciCulture support for the production of this publication does not constitute an endorsement of the contents, which reflect the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.





EDUCATION TODAY

CHALLENGES OPPORTUNITIES —

DESPITE GENEROUS EFFORTS OF
IMPROVEMENT,
EDUCATION
FACES A NUMBER
OF CHALLENGES
CALLING FOR AN
IMMEDIATE SOLUTION.

Special programs and inspirational people try, by whatever means available, to modernize otherwise outdated educational practice by implementing bold programs in a new direction.

Their ally is Europe's willingness for change, and their enemy is the rigidity of the system and its resistance to the total integration of these innovative programs.

A MAJOR CHALLENGE OF EDUCA-TION.

The most important challenge today's education is facing is not linking education offered with real life and thus the labor market.

Although several programs have been implemented in this direction (such as the 'Virtual Student Apprenticeship' and the 'Postgraduate Year - Apprenticeship Class') of technical training, they do not enjoy the expected reforms and introduction to the subject curricula that cover basic knowledge and practices related to creativity, innovation and entrepreneurship, as well as the relationship between cultural background and entrepreneurship.

Addressing this challenge requires immediate action at the individual and collective level, as well as a legislative framework for the state to take a small but important step towards the future of education.

In a world where technology is moving at enormous speeds, it is impossible to predict the School of the Future. What we can do, however, is to prepare tomorrow's citizens by equipping them with all the skills and abilities they will need, with the necessary Values and Ethics to create a society that will not repeat the mistakes made by previous generations. As Craft (2013) suggests, instead of believing that young people are at risk because of the invasion of technology in their day-to-day lives, we should encourage them to use it to promote empathy-based collective living for a brighter future.

THE URGENT NEED FOR EMOTIONAL EDUCATION

The first step that must be applied directly to schools, in our opinion, is the Emotional Education. Let's see, firstly, what is meant by this term.

The social and emotional learning (SEL) is the process through which children and adults understand and manage emotions, set and achieve positive goals, feel and show empathy for others, create and maintain positive relationships and make responsible decisions (CASEL)

WHY SHOULD EMOTIONAL EDUCATION BE FIRSTLY IMPLEMENTED, BEFORE OUR FIVE SUGGESTIONS?

The lack of emotional education has left a huge gap in education and can be acknowledged in a number of emerging problems that could have been avoided. In-school violence and intimidation, the inability to immediately resolve interpersonal problems, the lack of learning how to manage emotions are some of them and the list is getting longer and longer.

However, the profits of Emotional Education are also beneficial for improving communication skills and achieving happiness in students' lives as well as later as adults. Emotional Education provides tools that help activate Creativity, Problem-Solving, develop Emotional Intelligence, improve Analytical Critical Thinking. It creates the conditions for Active Learning in a Developmental Mindset, upgrades personal judgment and decision-making abilities with self-taught courses, dramatically improves Interpersonal Communication Skills and Leadership Abilities, helps in the Acceptance of Diversity as well as the upgrading of Cultural Intelligence, and enhances the Seeking and Acceptance of Change. With Emotional Education, citizens of the future will be better prepared for success and happiness in their lives as well as for finding innovative solutions needed to implement the five suggestions presented.

HOW COULD AN EMOTIONAL EDUCATION PROGRAM BE DESIGNED?

The program we, as the authors of this concept note *,propose for the immediate integration of Emotional Education at school, will aim at the direct education of teachers, students, parents and adults in general, focusing on emotional education and communication, using the most modern technological means for its immediate application. It will not be in theory, but will go into practice providing comprehensive research, theory, practical application and treatment if needed.

THE BENEFITS OF EMOTIONAL EDUCATION

- Awareness of the emotions experienced by the learner at all times.
- Recognizing the nature of these feelings and the traits / effects that they pass to my physiology.
- Decoding the message contained in each emotion. Where does this message come from and what does it aim on?
- · Ways of Managing Emotional Expression.
- · Managing the underlying message.
- Learning to reproduce positive emotions while limiting the negative ones (positive thinking, relieving negative emotions, etc.).
- Cultivating self-esteem and self-respect: the abundant source of positive emotions
- Understanding the emotional relationships governing our social contacts.
- Empathy development: How is the other person feeling now? How do I manage a social contact full of negative emotions? etc.

This program could be a comprehensive proposal, meeting all the needs of the future citizen, the skills needed, dramatically contributing to the moral and spiritual development of students, parents, teachers and adults.



WHAT ABOUT EMOTION-AL EDUCATION TODAY?

Our research has shown that America is a pioneer in Emotional Learning. Top Universities such as Yale and institutes such as Casel, Ruler, Committee of Children, etc. develop studies, training and scenarios for students and adults. In contrast, Europe, and especially Greece (where this concept note was written), despite efforts by supportive programs, has not yet been able to integrate Emotional Education into its educational system.



THE SCHOOL OF THE FUTURE

DEVELOPMENT

"SCHOOL IS THE GATEWAY TO A HAPPY LIFE"

Studying all of the above and dreaming the school of the future, we came up with five suggestions that would form an ideal educational setting. We understand that our proposals are mainly theoretical. Some of them are not directly applicable, while others are already implemented in different countries.

The purpose of our study is to present a clear pathway to an ideal educational future and not practices directly applicable. However, we are looking to include the educational trends presented in this OECD study (Trends Shaping Education 2019, OECD), as this organization has a significant influence on education planning in many countries worldwide. The last chapter presents an immediately applicable proposal that can be seen as a first step towards education and the school of the future.

DEVELOPMENT

We believe that school should be the first step to humans integration into society. It has the ability to create free people with critical thinking, moral, emotional intelligence, acceptance of every person's diversity, cultural intelligence, interpersonal ability and collective action without any exclusion.

To achieve this, we studied the concerns, assumptions, and forecasts for the evolution of education systems and came up with five suggestions that can help develop the most important skills that humans should have in the future.

Below we develop the five proposals to clarify their connection to the requirements of the school of the future. The starting point for the development of the proposals was the World Economic Forum

- · Thinking, Creativity,
- · Emotional Intelligence,
- · Analytical Critical Thought,
- · Active Learning with Developmental Mindset,
- · Crisis and Decision Making,



- Interpersonal Communication Skills,
- Leadership,
- Diversity and Cultural Intelligence,
- Technological Skills,
- · Seeking and Accepting Change.

They refer mainly to the second and third education level, including the first, one that provides the primary bases of personality formation by creating a solid base for the next.



This may be due to the industrialization of education as Robinson (2015) mentions, stating that schools seem to follow factory structures with classroom-like production lines. According to Snaza et al. (2014) and Adams (2016), when students are confined to the classroom, their creativity is automatically discouraged and their personality is not fully developed.

The learning environment is "the third teacher" according to Reggio Emilia as reported by Fernández Santín and Feliu Torruella (2017: 53). This means that the learning environment has a direct impact on the way children learn to think and behave. Considering Chappell's (2018) suggestion that space is an important factor in the creative process, it seems vital to rethink the places where learning occurs in schools today. In the school of the future, the education system will allow students to learn outside the classroom. Students will be able to take a lesson in nature, observing the natural environment more and knowing it through all five of their senses. They will also have the opportunity to learn in professional areas directly related to the educational subject.

The Benefits of Indefinite Learning Space for Citizens of the Future.

01

Creativity

A child from the first steps of socializing feels free, not trapped in a classroom, on a school desk. Their creativity is released in the absence of the natural limiting factor of the classroom and thus creates people who, in their personal life and work, can think "out of the box" finding creative, and innovative solutions because they are simply trained to operate in this way. Hall and Thomson (2017) also underline the need for modifying learning spaces to promote students' creativity.

02

Emotional Intelligence

The ability to regulate our emotions is synonymous with creation.

The absence of a designated learning space brings students closer to one another. They can understand their own emotions and that of other people by coming into direct contact with them. They can even recognize the origin of their emotions that arise when interacting with others. The ability to cope with conflicts or difficult times and more generally to manage emotions is a key element of emotional intelligence.

Students - tomorrow's citizens can be trained to identify and express their feelings on all of the above issues, then explore them to look for solutions. They will also be able to realize that their own well-being depends on the quality

of the environment in which they operate. In addition, issues / challenges that have environmental, socio-economic and political implications will be the content of the syllabuses, which will induce them to interact permanently with the real world. In summary each student will:

- Accepts stimuli
- Feels
- Interact
- Investigates
- Finds solutions
- It develops critical thinking
- Become creative
- It makes decisions
- Communicates



03

04

05

Analytical (Critical) Thinking

The absence of a specific learning space helps students to develop analytical and critical thinking because of their daily meeting with students and to help them become aware of issues that indoor spaces could not achieve.

Active learning with a growth mindset

The absence of a defined learning space, and the absence of physical restraint (walls, ceilings, doors) allow the mind to grow continuously. They thus experience the deep need for sustained growth through active learning one located in the environment that allows for experiential learning.

Crisis and decision making

The absence of a designated learning space allows for freedom of expression and problem solving so that students may, in some cases, students will be able to decide the place where the lesson will take place

06

 $\bigcup /$

08

Interpersonal communication skills

The absence of a designated learning space maximizes the communication between students and teachers as there is no predetermined mode of communication. It requires students to be in direct contact with each other but also to communicate with nature natural business premises, bringing them in contact with community professionals and forcing them to communicate effectively with them.

Leadership

The absence of a designated learning space promotes Leadership Skills. The active need for a class president takes on a real existence with obligations and rights. Participation in decision-making creates the prospect of future public participation, such as participation in the electoral process.

Diversity and cultural intelligence

Σε αυτόν τον τομέα η πρόταση για μη ύπαρξη καθορισμένου μαθησιακού χώρου βρίσκει τις μεγαλύτερες εφαρμογές. Η άμεση επαφή με τους συμμαθητές, τους ωθεί στην αποδοχή της διαφορετικότητας, στην καλύτερη κατανόησή της και στην αναβάθμιση της πολιτισμικής νοημοσύνης.

09

Technological skills

In this area, the proposal for a non-existent learning space has unexpectedly the greatest benefits.

In order to conceive and implement pioneering and innovative ideas, the mind needs to operate freely, without restrictions and commitments.

Open learning spaces reinforce this

perspective.

At the same time, visits to state-of-theart technology sites bring students closer to new learning objects and enable them to work creatively in places that were previously inaccessible. 10

Seeking and accepting change

The absence of a designated learning space and the constant alternation of spaces chosen by students and teachers achieve not only the acceptance of change but also the pursuit of change.

PROGRAMS ALREADY SUPPORTING THE INDEFINITE LEARNING AREA:

Program School, Country- Educational Model	Where it contributes	LINK
Forest schools,Snaresbrook, London UK -Forest school learning model,outdoor education	School of all grades (from 4-18 years old) which, in combination with the classroom, is based on forest school pedagogy and on-site education. With the contribution of specialized instructors in the field, students develop individual, social and technical skills as well as the concept of exploration and creation	Link
Outdoor education/International School of Stavanger (ISS), ,Norway -Forest school learning model	A program at Stavanger International School in Norway where students build teamwork and collaborative skills while learning about local culture and the beautiful Norwegian countryside	<u>Link</u>
NuVu, The innovation school Cambridge,USA, -Studio Mode	A key principle of the Nuvu pedagogical studio model is the absence of classrooms (in the classical sense).Instead, there are constantly changing spaces to serve the needs of each studio, in which a project is being done.	<u>Link</u>
FOREST AND NATURE SCHOOL "PEFKITES" Dionissos, Attica, Greece Forest school learning model	The Pefkites Forest School is the first forest school in Greece. "It aims to fully develop children's emotions, their kinetic integration, and to cultivate respect for fellow human beings and nature, in the natural environment, experientially, freely, without walls." Complete daily early childhood school exclusively in the woods and school shelters (2-5,5 years old). Sunday and Summer Program for Middle Childhood (6-12 years old)	Link



The new education system has to teach processes and analytical skills through dialogue. Students thus achieve a positive constructive relationship with each other in order to become members of society, because an environment that produces this desired behavior will be designed. It is not so that people will suddenly become better or more ethical, but that the conditions responsible for their hostile and selfish behavior will be very rare. Every new project can be explored through collaboration. This enlightened form of education helps to understand its advantages. Students can take advantage of opportunities to learn how to communicate better with others by resolving nonviolent differences and to be introduced to problem solving tools that allow them to engage in a wide variety of fields and explorations. Practicing in each field is not compulsory or monotonous and does not entail competitive competition but is integrated into the educational experience. There are no grades in this educational system, children will learn what is important to them, what they really want to learn to achieve their goals and be happy about it! In this process, they work in teams. They seek the help of their mentors / mentors / teachers. They discuss whether the learning process is effective or not. Each of them is responsible for their work. They interact and decide how to proceed for better results. They present their reactions to their colleagues. They hear their comments. They keep working until they finish their job! No need for grades The benefits of a different, more flexible evaluation system for citizens of the future.

The Benefits No Grades for Citizens of the Future.

01

02

03

Creativity

Creativity is not evaluated numerically. Students who are free to think and implement their suggestions contribute eg. solve problems in the local community or bring out issues that interest them without restriction. There could be a reflection of each student in collaboration with his / her teacher / animator / mentor about:

- the originality and feasibility of an idea,
- the extent of his involvement in the completion of an original project
- completing an innovative personal work, etc.

Emotional Intelligence

The development of emotional intelligence and the level at which each person / pupil has it requires other criteria than sterile grading (eg Evaluated how he / she interacts / reacts / contributes to his / her interaction with classmates, teachers / mentors). or other professionals).

Analytical (Critical) Thinking

It develops in solving problems related to student life and the local community. The numerical evaluation may not be sufficient. The ability to choose the best or most feasible or advantageous process, inter alia, that will lead to a problem being solved is an important

The reflection of each student in collaboration with their mentor / teacher on the development of their analytical thinking can be another form of assessment.

Active learning with Crisis and decision a growth mindset

The student learns how to learn throughout his life. Reflects and improves and / or enriches what he has learned according to the needs of his life as he develops.

The development of this skill could begin in the early years of his school life.

making

The process of reflection requires critical thinking to make decisions that are often more or less important to one's

At the end of each school year, it is possible to evaluate whether or not students' decisions were successful (objective, criteria by which he made his decisions, results).

Interpersonal communication skills

At every aspect of their life and of course within the school community and their family ,interpersonal and communication skills improve the quality of students' life and enrich it.

Their development or not can not be characterized to a degree on any scale.

It is estimated by the acceptance they get in the teams involved.

Leadership

Leadership skills are distinguished and recognized by their environment many times in a student's life. They are cultivated through specific educational processes, which have nothing to do with numerical evaluation.

More specifically, these skills are cultivated through the roles that the students take over or those that the school community assigns them with.

Diversity and cultural intelligence

The acceptance of the diversity and cultural identity of each "different person" the students encounter applies to all the "others" in their life.

The trivial "every person is different" highlights and describes the reality of his / her life.

Our students, as tomorrow's citizens in a rapidly evolving multicultural society, have only one choice: To develop this ability. Otherwise, they will embrace the inadequacy to move on. Not graded,

cultivated in a variety of ways! Through collaborative processes each student undertakes to perform tasks that excite him / her, according to his / her skills and calls, that is, his / her "real" desires. The role of the mentor here is crucial. He will coordinate the group so that each student enriches the group with his or her different identity.

Technological skills

In our time we are talking about technologically literate citizens. Technology is evolving rapidly, and only "lifelong learning" can enable today's children to not miss the opportunity to find work, but also to meet the needs of their daily lives.

If they had to be numerically evaluated, very often the one who would get a great deal at some point would very quickly be considered illiterate.

Seeking and accepting change

In our rapidly evolving society, as we have already said, the pursuit of change is the need for survival and acceptance of the way we live our lives.

PROGRAMS THAT ALREADY SUPPORT THE MOST FLEXIBLE LEARNING ASSESSMENT SYSTEM

Program School-Educational Mode	Where it contributes	LINK
National Certificate of Educational Achievement (NCEA) New Zealand Level based education with credits	This Program is a program of certification of students' educational skills and knowledge without the use of grades applied in New Zealand schools. Basic principles underlying: Each year, students study a series of courses or subjects. In each subject, skills and knowledge are assessed according to some standards. Schools use a range of internal and external assessments to measure how well these students meet these standards. When a student achieves a standard, he / she earns some credits. Students must obtain a certain number of credits to obtain an NCEA certificate. There are three levels of NCEA certification, depending on the difficulty of the standards achieved. In general, students at school work through levels 1 to 3 in years 11 to 13.	Link
NuVu,The Innovation School Cambridge USA, Studio Model	Nuvu School has a portfolio in place of award-winning students. Each student enriches their portfolio with the blueprints they prepare and the final demonstration of the products they make	<u>Link</u>
Brighton waldorf school, Brighton UKWaldorf / Steiner Education *Currently, there are about 1,000 Waldorf schools in 60 countries. Approximately 150 Waldorf schools are currently operating in North America. There are also public Waldorf programs in Milwaukee, Wisconsin and Detroit, Michigan.	This school belongs to the international community of waldorf schools based on the "Waldorf / Steiner" education model. Learning at Waldorf School in Brighton is a non-competitive activity. Until the age of ten (Lower School) no grades are awarded, instead teachers write detailed assessments for each student at the end of the year and keep a regular record of their progress.	Link



Note

Apart from technology, all others are "soft skills" that refer to the combination of a person's interpersonal communication abilities, his personal beliefs, his overall approach to life and work, his emotional intelligence and the key features of his personality.

Unlike 'hard skills' (technological, but necessary) which describe the set of technical abilities a person uses to perform a series of specific tasks within a single profession, 'soft skills' are widely applied to many different professions and fields.

In an age of intense competition, such as today, it is of the utmost importance that one possess these skills that can make him stand out from a multitude of well-trained people, and can therefore be the determining factor in finding or not finding work. . A typical example is the phrase of many experts: "hard skills can 'interview' you, but you need soft skills to get - and keep - the job."

In addition to the area of work that is crucial to the fullness of a person's life, "soft skills" create the conditions for a better quality of every single moment of his life.

They are cultivated from an early age through activities and evaluated through the daily experience of the individual, the process of reflection and the recognition / management of emotions within him, acceptance of the community in which he is active and the long-term effects on his life.

Not to be rated with a number!



This issue-problem is called upon to help and solve (in conjunction with other practices proposed) the Mentor. His role is to work with his student and propose learning paths that suit his personality but also provide the necessary training and specialization that make him indispensable in the job market.

The Benefits of Having a Mentor - Couch, Complementary to Teachers - Teachers for Citizens of the Future.

01

02

03

Creativity

Cultivating creativity is not a straight-forward process. Mentor's role is to co-ordinate the student's actions in collaboration with teachers to nurture the need for him / her to solve problems in original ways (Craft, 2010). Craft (2010: 20) also states that it is important for the teacher to "stand back" so that there is room for learners to be at the center of the learning process. This means that he also sees the teacher more as a mediator, rather than as the only dominant person in the class.

Emotional intelligence

Developing Emotional Intelligence under the guidance of Mentor, helps the student identify his / her needs and position in his / her social environment and look for ways to improve him / her. Simultaneously with Mentor's floating skills he manages to solve small, everyday emotional problems and trains the student to handle them holistically

Analytical (Critical) Thinking

Analytical and non-linear thinking, help the student to analyze and identify the parameters of a problem and place it on a more general and broad scale. The student's personal time with his / her Mentor manages to develop this skill with the appropriate tools used by the Mentor

06

Interpersonal communication skills

Mentor's role helps to a great extent in creating good interpersonal relationships but also in reducing and managing tensions.

07

Leadership

As mentioned before, the role of the mentor helps the student to understand his / her position and role in a group. So he knows best when to take action or not.

08

Diversity and cultural intelligence

Being a mentor helps to accept diversity and upgrades cultural intelligence through its tools for communicating and solving student problems. A specially trained Mentor will be able to assist in a deeper understanding of diversity, and with his or her specialized tools for measuring and upgrading cultural intelligence will help the student in accepting and understanding the diversity of cultures.

04

Active learning with a growth mindset

In this area the existence of Mentor finds its best application. The Mentor assists in making decisions about the student's education and encourages him / her to "take over" the student, the learning process. Their collaboration

does not end with the end of "classical" education, but it transforms over the years into a selfless life partnership and learns to recognize opportunities where one might see problems. 05

Crisis and decision making

The active learning process, in collaboration with the Mentor, helps the student to take an active role and make decisions for himself and his team.

09

Technological skills

Mentor's role is multifaceted. One of his responsibilities is to help him understand the role of technology and to use it as a tool to improve his day-to-day life.

The mentor suggests developing technological skills when the results of special tests are appealing to them.

But even in non-appeal cases, the men-

Τ,

tor's role is important because it helps the student in technological literacy with games and fun applications Seeking and accepting change

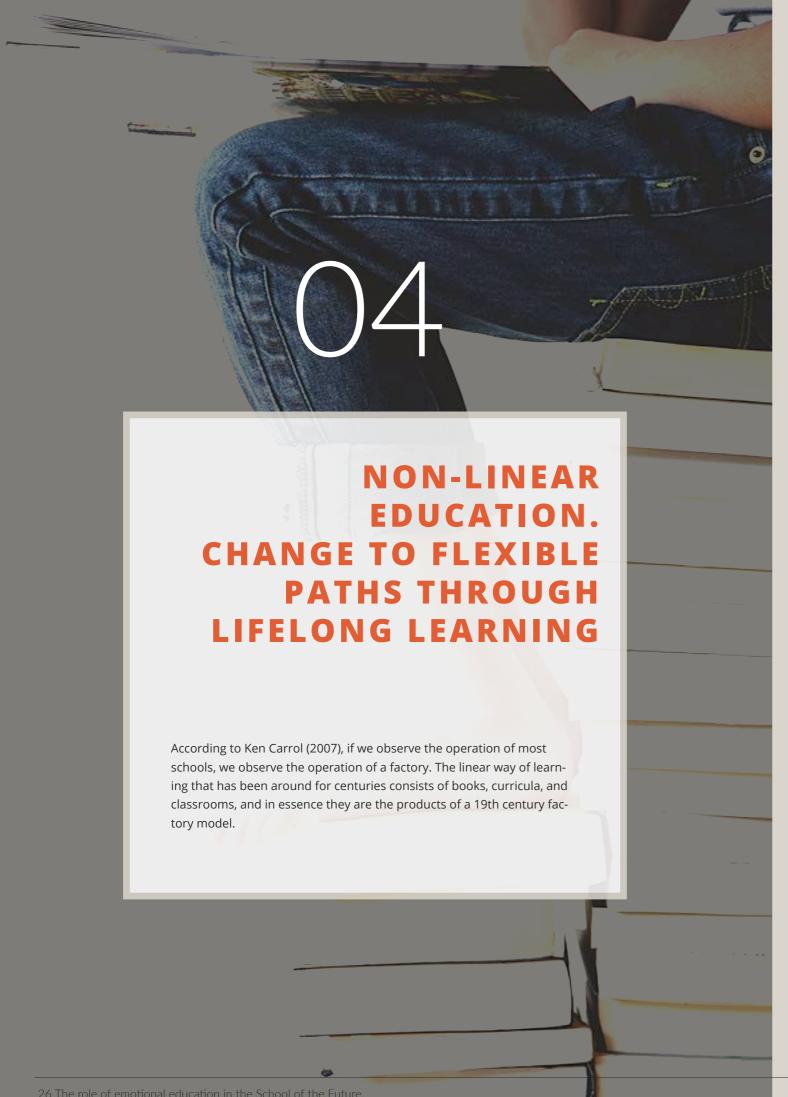
Mentor's role is to help the student understand that he or she lives in an ever-changing environment where the citizen has to understand the reasons that lead to change so that he / she can adapt and find his / her place in future developments.

PROGRAMS THAT ALREADY SUPPORT THE EXISTENCE OF MENTORS - COACH IN ADDITION TO THE TEACHERS:

Program School-Educational Mode	Where it contributes	LINK
NuVu,The Innovation School Cambridge USA, Studio Model		Link
Pedagogical Frene / The truancy		



The mentor's role is a link between student, school - classmates, teachers - teachers and parents. He acts as a consultant and as a couch and helps to smooth out internal reflections, interpersonal relationships and decision making that will help him personally define the happiness of his life. Its role is synonymous with the role of society in the development of an active citizen.



To this day, when the bell rings each student and each instructor enters his or her assigned position for the next teaching time until the next bell (stepwise procedure) According to the given linear education, each student receives their own mass production cognitive content designed using standard structures that clearly do not meet individual learning needs (Ken Carroll, 2007)). its memorization and reproduction which stops after the end of education.

In the age of globalization, continuous digital evolution and endless information however, this kind of knowledge is accessible and easy even if there was no such school. Our main concern now is to learn how to manage information, the efficient way learning, tailor-made education and lifelong learning.

As Ken Carrol (2007) points out, nonlinear learning is not something new but in fact it is more natural, it is the way we have been learning for a few hundred thousand years. In nature, there is no linear learning as people have not learned how to swim or hunt in a linear way but through direct experience, dealing with things when they happen, discovering the important one at a time In life, outside of school, we learn and learn by making connections between things we already know and things we do not know, so we actively construct the knowledge we need. Everything is very subjective and individual rather than linear. Nonlinear education solves problems as it relies on the natural emotional mode of learning. Nonlinear learning gives priority to experiential learning and the exchange of trainer-learner-environment knowledge to feedback and expand knowledge into something new.

The Benefits of Non-Linear Education to Citizens of the Future

Creativity

In the case of non-linear education as well as lifelong learning, the learner follows the natural way of learning experientially and with knowledge sharing. This promotes creativity as it is not simply provided for the sake of sterile memorization but uses information as puzzle pieces.

Emotional Intelligence

Studies have suggested that linear thinking is related to cognitive intelligence, whereas nonlinear thinking is more related to emotional intelligence. This notion is linked to the concept of linearity developed in science.

For example, in Mathematics a linear model is characterized by a linear equation which means that data and solutions must be analogous to something that is not true in the natural way of learning. And yet the linear way of promoting education works in this way. In fact, the child is the learner and therefore does not act one-dimensional linear but uses his senses and emotions in the learning function from the moment he is born.

Emotional Intelligence is the one that will help to properly manage and exploit them in the learning process, which will continue throughout the adult life.

Analytical (Critical) Thinking

Learning never ceases to be active. The mentality of the daily program with the separation of courses is a major problem in the creation of one-dimensional students and subsequently inactive citizens.

Active learning with Judgement and dea growth mindset

Learning never ceases to be active. The mentality of the daily program with the separation of courses is a major problem in the creation of one-dimensional students and subsequently inactive

Non-Linear Education provides the ground for all these connections to be efficient and not chaotic for each student but also for beginning to find their strengths.

In the job market communicational

skills are either way a priority.

cision making

The linear way of thinking is activated when the student is able to manage the new data and furthermore he is able to take the suitable decisions. Judgment and decision making are key points in the job market.

Such an example is a salesman who everyday collects information and is receiving different indications and priorities from every customer. It is a matter of judgment and ability of the salesman to take into consideration the information given for the next client.

Interpersonal communication skills

Interpersonal skills are a non stop evolving and ameliorating process.

When an individual is capable of managing and understanding his own feelings is able to understand those of someone else.

By communicating, exchanging knowledge is done also by reversing the roles of trainer - trainee by creating the non linear way of lifelong learning from childhood to adulthood.

Leading Skills

Being able to lead as well as to follow is a goal in life.

There are many who lead without competence and many who have skills but never have the opportunity to show them, and some have never had the opportunity to learn it themselves. In the model of non-linear learning through games and experiential workshops, the roles of instructor-learner are constantly alternated.

When one learns in a group to go through all the roles and realizes that this has to be done consistently, he or she eventually succeeds in achieving



a harmonious life where he can lead when needed, without outshining the other members of the team, and so can successfully pursue freely participating. helping the team with its own abilities.

Diversity and cultural intelligence

The nonlinear way of learning provides the student with diverse and different knowledge stimuli, that he has to explore.

Every student chooses naturally what is best for him and then evolves it.

By this internal procedure the student understands the meaning of diversity and takes a viid role in the community. Oliver, Botton, Soler, & Merrill, 2011.

Based on this statement the only way of achieving cultural intelligence from a very young age is not only through studying but through experiencing as well something that is done by nonlinear learning.

In this type of learning the students exchanges experiences, opinions and knowledge with his classmates, friends, neighbors and educators.

his is the way his cultural intelligence is

evolving.

All the aforementioned constitutes the needed supplies for his further career.

Technological Skills

The main goal of nonlinear learning is to develop strong personalities, who can use consciously new technologies in their benefit, without side effects. This whole procedure will accommodate their right management. The internet so as the mind are based on links and junctions representing this way the natural way of learning.

Pursuit and acceptance of changing

The nonlinear way of learning helps the student to accept the changes that happen to himself and others and combine the old and the new, so as to have a natural continuance. Getting attached to past habits is as useless as getting rid of them. Nonlinear education uses networks not paths and this constitutes the structure of evolution and change.

PROGRAMS ALREADY SUPPORTING NON-LINEAR EDUCATION (IN SOME WAY)

Program School-Educational Mode	Where it contributes	LINK
Sudbury Valley School, Framingham, Massachusetts, USA -Sudbury school model *The first sudbury school	The pedagogical philosophy of a sudbury school is based on nonlinear education as: It is governed by democratic education in which students have a responsibility to educate themselves almost on an equal footing with teachers. argues that learning is a natural byproduct of all human activity.	<u>Link</u>
NuVu, Cambridge USA- Studio Model	In this school, learning is mostly done through studio workshops.	Link
Integral Colegio, Brazil -Freinet Education system	This school operates under the Freinet system of educators. The basic Frenee principle applies and is a non-linear approach: freedom of choice of work-action plans (collective and individual, according to students' interests, inclinations and talents) and in the design of the individual work plan. In addition, lessons and each discipline are a tool for understanding each student's day. They are not a purpose but a means for them to act.	Link
a The Brighton Waldorf school -Waldorf /Steiner model education b Detroit waldorf school Detroit,USA -Waldorf /Steiner model education https://www.detroitwaldorf.org/strategic- plan-20192023 *These two schools are notable examples of waldorf schools founded by Steiner in Europe and America.	A key element of Waldorf education followed in schools and a non-linear learning approach is the existence of the main lesson. It is taught by the classroom teacher, focuses on an academic subject and is completed in three to four weeks. Students create their own lesson handbooks that record their experiences and what they have learned. By creating their own workbooks, students consolidate knowledge more consistently than simply reading a book while building the confidence and joy of creation. Brighton School has additional programs following a non-linear way of teaching: Lectures by speakers from different fields (health, social and business, etc.) on topics raised and discussed in previous workshops and school lessons. Students attend workplace seminars to explore them closely. Formal debates are held around emotive issues. Thus, pupils learn the differences between objective and subjective views experientially. In addition, these events allow students to publicize their views and ideals, to challenge and be challenged in a safe environment.	Link



The goal of human nature is to evolve, innovate, research, develop critical skills and seek innovative methods and ideas to lead to a better future. It also aims to teach metacognition empathy and lifelong learning without limitation so as to maintain our humanity in spite of being facilitated by machines .

Combined Learning, Experiential Learning, Maieutics are the "tools" for mentors and learners to teach one another, the elderly to teach the young, the young to teach the elderly, indoors or outdoors, online or offline. Young people, especially in the era of change and image, are easily affected and seek action by gaining new experiences, depending on their flairs and calls which are more meaningful when shared.

The benefits of different ways of learning to the citizens of the future.

Creativity

Every human being is called upon to face significant or insignificant challenges in the different roles in both his personal and professional life. Creativity, when developed as a skill, helps in meeting the demands of these roles. In his personal relationships, his creative thinking will enhance the pluralism of approach of different types of personalities. On the other hand, his employers will seek not only highly skilled employees but also ones with innovative ideas to be implemented when taking the initiative. This is also the difference from our PCs we are "slow" but we are inventive and creative.

Our creativity is enhanced by the multiple ways we learn. Combined Learning, Experiential Learning, Maieutics, Guided Research, Apprenticeships, Teaching Dialogues, Lectures, Seminars, Negotiation Games, Individual or Small Group Projects, E-Learning and Planned Techniques are some of the interactive learning methods to choose from

Evolution, innovation and creativity

must characterize our education and our lives in general so that we are prepared for and able to fight against any difficulty in life not only as students but also as mentors, to teach and be taught in school and in any other future workplace.

Emotional Intelligence

Teachers with developed emotional intelligence interact with respect for the students' personality meeting high ethical standards, building knowledge together with them. They focus on each of them individually (on his feelings and on his profile in general), as well as on his position within a group (his family and class). To the extent that they can devote themselves to the function of the teacher mentor with love and commitment to it. They are also called, as mentors, to continually reinforce their own emotional intelligence. They can never be completely satisfied with what they do as responsible "Teachers". The mentor is always looking for ways to improve the learner's cognitive practices and ethical areas. He is looking for ways to empower citizens with empathy and not just knowledge.

Thinking

lifelong learning path.

Analytical (Critical)

This variety of teaching approaches

students' critical ability who, with their

mentors, are looking for new ways of

increased metacognitive ability on a

communicating for a better future with

leads to the development of the

Active learning with Crisis and decision a growth mindset

Different ways / approaches / learning tools to tackle the diversity of human nature lead to adults with increased reading skills, developing mechanisms allowing them to learn on their own in the future. Lifelong learning leads to their continued development both as individuals and as professionals.

making

Developing critical thinking leads to an increased efficiency in decision making especially if there is a corresponding emphasis on the use of the appropriate teaching method.

Interpersonal communication skills

A variety of teaching approaches reinforce the core goal of staying human, despite the development of technology, at all stages of education. Students are thus driven to develop interpersonal relationships and communication skills to a greater extent.

Leadership

The leader in order to be charismatic. this is the kind of we are looking for, must bring together a multitude of abilities and traits, including the aforementioned namely increased Emotional Intelligence and Analytical Thought (Zhao, 2009).

He / she must also have a passion for active learning with a growth mindset, increased judgment and decision-making skills, interpersonal communication skills, self-confidence that is nurtured and strengthened by diverse teaching approaches, acceptance of diversity and cultural intelligence, and technological skills and pursue and acceptance of change (Goleman, 1999, 2006; Flouris, 2007 / Pasias-Flouris, 2016).



08

09

10

Diversity and cultural intelligence

The diverse teaching approaches, making acquaintance with many different people in education lead to respect for diversity and the development of cultural intelligence.

Technological skills

The development of technological skills in a galloping technological society is self-evident

Seeking and accepting change

Training through a variety of teaching approaches aims at continuous change in order to avoid constant fatigue as well to continually rotate experiences so as to develop empathy and critical competence along with other skills. Through them change is a goal and we strive for it to lead to a better tomorrow.

PROGRAMS THAT ALREADY SUPPORT DIFFERENT APPROACHES TO LEARNING:

Program School-Educational Mode	Where it contributes	LINK
Sudbury Valley School, Framingham, Massachusetts, USA -Sudbury school model		Link
NuVu, Cambridge USA- Studio Model		<u>Link</u>
National Certificate of Educational Achievement and secondary schooling	Level based education with credits	<u>Link</u>
Forest school		<u>Link</u>
Big Bang School, Thessaloniki Greece		
a Brighton waldorf school, Brighton UK Waldorf/Steiner school model b Detroit waldorf school Detroit,USA -Waldorf /Steiner model education	 Waldorf schools support teaching with different teaching methods, mainly through: storytelling art In addition, Steiner applied the four temperaments theory to his pedagogy. Based on the theory, the four temperaments are: melancholic, optimistic, phlegmatic (calm) and choleric (delusional). Steiner argued that most people express a combination of temperament and not a single type. Based on Steiner's pedagogy at waldorf schools: teachers need to consider their own temperament and be ready to cooperate positively. teaching and educational activities vary according to the needs of each student dictated by the 4 psychophysical types 	

ROADMAP OF THE FIVE PROPOSALS

THE PATH TO THE FUTURE

WE ARE PLEASED TO SEE THAT MANY OF OUR PROPOSALS FOR THE IDEAL SCHOOL OF THE FUTURE FIND MANY PROGRAMS THAT ALREADY WORK AND SHARE THE SAME VISION. WE RECOGNIZE THAT SOME OF THE PROPOSALS TAKE LONGER TO IMPLEMENT AND OTHERS ARE READY FOR IMPLEMENTATION, SINCE THERE ALREADY IS THE REQUIRED EXPERIENCE AND TRAINING.

IN THIS CHAPTER WE WILL PRESENT A SUGGESTED ROADMAP, RANKING OUR FIVE PROPOSALS BASED ON THEIR FEASIBILITY.

First in line of applicability, our fifth proposal. Different ways / approaches / learning tools for dealing with the diversity of the human nature

Based on our research we find that the ground is ripe for implementing a more generalized, different approach to learning, with many programs already moving successfully in this direction. We need an inspirational panel of experts to evaluate their programs and results and select the most successful ones to expand their field to other courses and directions until the full range of education is covered.

Second in line of applicability, is our second proposal. No grades - but a different, more flexible evaluation system

We also see a strong mobility with programs and trainings here, which make the full implementation of a different, more flexible assessment system easy for many educators and society alike. We recognize the fact that some of the technical courses require a more stable assessment system. In most theories, the system can be completely replaced by a new one allowing for critical thinking and creativity.

We believe that, as time goes by, the role of technology will constructively enrich our education, providing a range of new tools, not just assessment. It may eventually partially replace the existing training as we know it.

Third in line of applicability is our third proposal. Mentors - Couches rather than teachers

The existence of Mentors is closely intertwined with Nonlinear Education but as you will see we recommend it 3rd in line while the Nonlinear 5th in line. This is because mentor training, as well as the adaptive changes, will take longer to complete so as to lead to the implementation of Nonlinear Education

Fourth in a series of applicability, our first proposal. Unspecified learning spaces (change from conventional room settings such as classrooms)

Although there are already several programs that have implemented the change from conventional to natural areas, the full implementation of the proposal also implies social changes, which in some cultures can be time-consuming, if not impossible. We recognize the security issues that arise as well as the transportation issues which we will need to find smart ways to solve.

Once more, we believe that technology development may provide some solutions in the future not yet imagined to be implemented. That is why it is in the penultimate position in our ranking, as far as their timing is concerned.

Finally, Fifth in a series of feasibility, is our fifth proposal. Non-linear training. Change to flexible paths through lifelong learning.

Most of the structural changes that require restructuring throughout the current educational system are also needed in this proposal. Implementing a lifelong learning education plan requires building structures for a new educational process by applying all of our four previous proposals. We also point out that changes are also needed in higher education in order to better connect it to the labor market, but also to the actual interests of today's and tomorrow's students, to play an essential role in educating the future.

WE BELIEVE THAT THE FIVE PILLARS WE PRO-

for education, step by step, can be implemented from the first tiers, transforming the education system from its foundation.

CONCLUSION

THE SCHOOL OF THE FUTURE AND THE ROLE OF EMOTIONAL EDUCATION



Much has been written about the problems and challenges to be faced by our educational system in the future. Bearing this analysis in mind, we took a step further. We made 5 proposals to be progressively implemented, in the existing educational system at the lowest possible cost and with the greatest impact. Simultaneously, we present an immediately applicable solution - a proposal for Emotional Education to be sufficiently developed in a future proposal.

We recognize the need to further develop ways of implementation of these proposals and our next work will be towards this direction.

Nevertheless, the time for review is over and the time for action has come. Having studies and applied practices at hand, we can create and implement a new, comprehensive, educational intervention to adequately enrich existing learning processes with Emotional Intelligence scenarios and training.

We are forced to take the lead in this development and take bold steps in the right direction, which will create empowered citizens, liberated by emotional, mental and technical constraints, capable of shaping the future of the past.

BIBLIOGRAPHY ARTICLES

REFERENCES

- Νίκος Β. Βιταντζάκης (2012) Αναζητώντας τους προσανατολισμούς της Ποιότητας στην Εκπαίδευση. Ένα οδοιπορικό από την Τριτοβάθμια έως την Πρωτοβάθμια Εκπαίδευση (1993-2012). Link
- George Liagouras ,Imilia Protogerou Yannis Caloghirou ,European Journal of Education,Vol 38,No4, (2003), Exploring Mismatches Between Higher Education and the Labour Market in Greece.
- World Economic Forum (2016), The Future of Jobs Employment, Skills and Workforce Strategy for the Fourth Industrial Revolution | <u>Link</u>.
- OECD (2019) Trends Shaping Education | Link.
- · CASEL, Collaborative for Academic, Social, and Emotional Learning | Link.
- Αβραάμ Μαυρόπουλος, Γιώργος Φλουρής, Εφαρμογή της θεωρίας της Πολλαπλής Νοημοσύνης στη διδασκαλία της Χημείας | <u>Link</u>.
- Γιώργος Φλούρης (2003), Καθηγητής Πανεπιστημίου Αθηνών, Μορφές Νοημοσύνης: Επιτυχία στο Σχολείο, στο Επαγγελμα και τη Ζωή | Link.
- · Zhao (2009), Ποια είναι η πιο «αξιόλογη γνώση»;
- Φλουρής (2007), Πασιάς, Φλουρής, Φωτεινός (2016), Δεξιότητες ζωής και καριέρας (ευελιξία & προσαρμοστικότητα, πρωτοβουλία και αυτορρύθμιση, κοινωνικές και διαπολιτισμικές δεξιότητες, παραγωγικότητα & λογοδοσία, ηγεσία & υπευθυνότητα)
- Βρασίδας, Χ., Ζεμπύλας, Μ., & Πέτρου, Α. (2005). Σύγχρονα παιδαγωγικά μοντέλα και ο ρόλος της εκπαιδευτικής τεχνολογίας. Στο: Σ. Ρετάλης (επιμ.) Οι προηγμένες τεχνολογίες διαδικτύου στην υπηρεσία της μάθησης. (σελ. 35-58), Αθήνα: Εκδόσεις Καστανιώτη.
- Constantin BRĂTIANU, Simona VASILACHE Academy of Economic Studies, Bucharest, Evaluating Linear Nonlinear Thinking Style for Knowledge Management Education | <u>Link</u>
- Esther Oliver, PhD, Lena de Botton, PhD, Marta Soler, PhD, Barbara Merrill, 2011, Cultural Intelligence to Overcome Educational Exclusion | <u>Link</u>
- Ken Carroll, (2007), Linear and non-linear learning | Link
- Andrew Johnson, (2019), Applying a business paradigm to schools and struggling learners, Academia.
 edu | Link
- Adams, J. (2016). The Question of Cost is Irrelevant. International Journal of Art & Design Education, 35(1), .4-7.
- Chappell, K. (2018) From Wise Humanising Creativity to (posthumanising) creativity. Palgrave Macmillan (in press), 1-37
- Craft, A. (2010) Teaching for possibility thinking: What is it and how do we do it. Learning Matters 15 (1), 19-23
- Craft, A. (2013) Childhood, possibility thinking and wise, humanising educational futures. International Journal of Educational Research, 61, 126-134
- Fernández Santín, M. and Feliu Torruella, M. (2017). Reggio Emilia, An Essential Tool to Develop Critical Thinking in Early Childhood. Journal of New Approaches in Educational Research, 6(1), 50-56
- Hall, C. and Thomson, P. (2017). Creativity in teaching: what can teachers learn from artists? Research Papers in Education, 32(1), 106-120
- Robinson, K. (2015). Creative Schools: The Grassroots Revolution That's Transforming Education. New York: Viking
- Snaza, N., Appelbaum, P., Bayne, S., Morris, M., Rotas, N., Sandlin, J., Wallin, J., Carlson, J., Weaver, J. (2014) Toward a Posthumanist Education, Journal of Curriculum Theorizing, 30 (2), 39-55

ARTICLES

- Ναταλία Πετρίτη (2017) Πολιτισμική Νοημοσύνη: Ένα κρυφό ταλέντο για την επαγγελματική επιτυχία, Τνχs | <u>Link</u>
- Αντώνη Ζαΐρη, Σταμάτη Ευσταθόπουλο, Αθανάσιο Κρυσταλλη (2019), Η ανάπτυξη της επιχειρηματικότητας και ο ρόλος της εκπαίδευσης, Καθημερινή | Link
- · Λίνας Γιαννάρου (2019), Η μεγάλη ευκαιρία της Αθήνας, Καθημερινή | Link
- Starting Point-Teaching Entry Level Geoscience, What is studio teaching? | Link
- Wikipedia, Sudbury school | <u>Link</u>
- Wikipedia, Forest school (learning style) | Link

REFERENCES

- Σωματείο Επιχειρηματικότητας Νέων
- Expansion Method

The proposal is also supported by:

Emotional Education for All For the study collaborated: **Argyris Stravelakis Mardas**, Entrepreneur, Creator of Expansion Method, Writer, **Asimina Kontogeorgiou**, Coordinator of the Secondary Education Project, **Catherine** Maria Rozi, Geologist, Secondary school Professor, Theodora Ghelis, Chemist Secondary school Professor, Athanasios Spanias, Physicist Secondary school Professor, Professor of Art, Photography, Melissa Selevista, Businesswoman, Physicist, Audiologist, MSC Student in Acoustics, Kelly Stavridaki, MA Creative Arts in Education. info@expansionmethod.com www.expansionmethod.com/the-foundation