

Prof. Dr. Albert Ferrer

**INTERNATIONAL EDUCATION FOR A NEW WORLD.
SAI INTERNATIONAL SCHOOLS.**

Philosophy of Education and Practical Pedagogy

For Integral Education in Human Values:

Towards the new holistic paradigm.

To my Indian children,
Chendu, Lokesh and Shruti.

And to my Guru in India,
Sri Sathya Sai Baba.

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This book constitutes an academic shorter version of the complete illustrated books presenting the Educational Project, “International Education for a New World”.

The original full-length illustrated work is offered in two formats:

- A three volumes book: introduction, practice and theory.
- A series of shorter books each centred on some topic or discipline.

The reader can refer to the full-length illustrated materials –either through the three volumes or the series of shorter books-.

There are still shorter materials in PDF or PPT format to present the Educational Project to a wider public.

The present book is a scholarly presentation of 782 pages out of the full length of the Project - 1200 pages-. Most of the sections have been arranged to be published autonomously as papers in international academic journals; they are all gathered here in a coherent way as an academic work.

The present book is developed by complementary volumes focusing on some other aspects of the Educational Project:

AN INTERCULTURAL PHILOSOPHY OF EDUCATION TOWARDS AN INTEGRAL VALUE-BASED PEDAGOGY.

THE SPIRITUAL MASTERS OF INDIA AND EUROPEAN PHILOSOPHERS.

Quantum Physics, New science and the New Holistic Paradigm towards Integral Value Education.

An Education for Consciousness within a Quantum World View.

THE TEACHINGS OF SATHYA SAI BABA.

INTEGRAL EDUCATION IN HUMAN VALUES TOWARDS A CONSCIOUSNESS AND PARADIGM SHIFT.

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Part I.

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International Education For A New World

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This Project is presented through:

- **Illustrated books in PDF and printed format:**
 - 1200 pages complete book (3 volumes)
 - 500 pages longer handbook/ 350 pages shorter handbook
 - 250/ 150 pages summaries and other shorter presentations
- **A set of 15 academic articles**
- **Power Point presentations (PPT)**
- **Videos/ interviews/ lectures (all in You Tube)**
- **The Project has also been publicized in several websites.**

➤ **The Project through different topics and disciplines:**

- Bibliography
- School outline
- Pedagogic project/ school guidelines
- School organization/ management
- Architecture

- Syllabus: International Baccalaureate from Geneva
- Practical tools for integral value education/ pedagogic models
- Psychology of education and neuroscience/ philosophy of education

- The teachings and educational philosophy of Sathya Sai Baba
- Scientific foundation: quantum physics and the new holistic paradigm
- The world crisis of boys' education

- Quotations from universal wisdom
- The Project through images

THIS EDUCATIONAL PROJECT CONSTITUTES A UNIQUE SYNTHESIS OF:

- **Comparative/ intercultural philosophy.**
The major philosophies through history evolving some kind of integral education on spiritual grounds: Vedanta, Buddhism, Platonism and Enlightenment/ Romanticism (Kant, Rousseau and Hegel; Emerson, Thoreau).
- **Comparative/ intercultural pedagogy:**
The main schools of holistic education in the modern world.
In India: Vivekananda, Tagore, Aurobindo, Krishnamurti and Sathya Sai Baba.
In the Western world: Waldorf /Steiner, Montessori, Dewey and Kilpatrick.
- **The best academic excellence from Europe/ the West and the most profound spiritual self-inquiry towards self-realization from India/ the East.**
- **Science and spirituality** (quantum physics/ new science in dialogue with the traditions of wisdom); **human development and education.**

IN PARTICULAR, THE PROJECT PRESENTS FOR THE FIRST TIME AN ORIGINAL SYNTHESIS OF:

- The most prestigious and holistic international syllabus: the International Baccalaureate from Geneva (Switzerland),
- And the most respected integral value-based education from the West and the East (inspired by renowned sages, philosophers and educationists from both Western and Eastern cultures).

This is maybe the first proposal of integral education that really blends in depth the best from the West and the East in an international horizon towards the unity of mankind.

It is also valuable for its articulation of:

- A profound, comprehensive and coherent pedagogic system
- With aperture of mind, being flexible and open to innovation;
- And a sound interdisciplinary theoretical frame on scholarly grounds
- Integrating education, philosophy, psychology, science and spirituality.

Beyond other holistic pedagogies that have been either scholarly but superficial, or deeper but esoteric, beyond many amateurish interpretations, this Project tries to unveil all the depth of integral value-based education in a serious academic format (at the same time beautiful and artistic) in order to bring it to the general public, and the educational, academic, scientific and governmental arena of the modern world on the threshold of a paradigm shift.

About the Author

And the Project.

Prof. Dr. Albert Ferrer was educated at the French School of Barcelona and graduated in Political Sciences and Sociology from the Autonomous University of Barcelona, specializing in International Relations. Afterwards, he did postgraduate studies at the Institut d'Etudes Politiques de Paris and the University of Cambridge, and he completed his Ph.D. (Doctorate) on Philosophy at the University of Paris-Sorbonne. His initial interest for Romanticism led him to the discovery of Eastern Philosophy.

After this scholarly training in some of the most prestigious academic institutes of Europe, Prof. Ferrer got the advice of the renowned philosopher Raimon Panikkar to direct his postdoctoral research towards Comparative/ Oriental Philosophy. He stayed in South India for long periods of time, visiting ashrams of the great sages, schools of holistic education and ancient Vedic schools, and studying in depth the traditions of spiritual philosophy of India, in particular the Vedantic lineage and the teachings of the great masters of modern India. He also lived for some time in Myanmar (Burma), where he combined his teaching duties with research on Buddhist philosophy in direct contact with Theravada monasteries.

During this period (1997-2002) he laid down the foundations of a new Project for integral education while transporting comparative philosophy East/ West into the educational field.

In parallel to his stays in Asia, Prof. Ferrer was a Lecturer at the University of Barcelona, Asia House (Ministry of Foreign Affairs/ Government of Spain) and several Departments of the Government of Catalonia (Religious Affairs, etc).

At a certain point of his life, an illness manifested which was incurable and hopeless for conventional medicine. Believing in his own study and work, and putting into practice techniques of meditation and healing, he totally cured himself at the astonishment of the medical society. Then he came back to India to start a new stage which still goes on (from 2005 on).

Since then, Prof. Ferrer has been living and working in South India with his adopted sons. During the period of elaboration of the new educational Project, he has been Visiting Professor in Sri Sathya Sai University, probably the best university of India, accredited A++ by the Central Government, while he got the counsel and blessings of Sri Sathya Sai Baba.

In his home town, he has been appointed as Consultant for Education to the Government of Catalonia.

The educational Project is being presented to sponsors towards its implementation and the creation of model schools. Through the trademark steward/ licence, it might be adopted by a diversity of organizations or educational institutes.

It has also been presented to the Prime Minister of India, the Chief Minister of Andhra Pradesh and the Dalai Lama among other personalities of India.

It has arisen a strong interest not only in India but also in Malaysia/ Singapore, Peru and other countries of Latin America, the USA and Europe, where Prof. Ferrer has been invited to present his educational philosophy.

Prof. Ferrer carries on a long-term research on spiritual philosophy and philosophy of education in a comparative perspective East/ West. His work focuses on the spiritual philosophy of Europe/ the West, India and Buddhism, and especially on the theory and practice of education from the inner spiritual dimension and wisdom towards a paradigm shift. Linking theory and praxis, Prof. Ferrer leads the study and the practice of holistic education from the inner being, from human and spiritual values, putting forward the philosophical foundations and the academic/ scientific grounds for integral education in human values, while exploring the techniques and instruments of this kind of education in terms of practical pedagogy. His perspective has found the way to combine the best academic education from the West and the most profound spiritual inquiry from the East.

At the same time, Prof. Ferrer works on the fundamental dialogue between science and spirituality, that is, the convergence between the spiritual philosophy of the ancient traditions and the new science of our time –quantum physics, new science, Jungian/ transpersonal psychology, etc-, collaborating in the emergence of a new humanism, a new holistic paradigm and a new unifying theory of knowledge and reality which goes beyond the limits of the former materialistic/ mechanistic model, and ultimately laying down the epistemological foundation and the empirical evidence for integral education in human values.

A PROJECT FOR HUMAN DEVELOPMENT IN EDUCATION.

INTEGRAL OR HOLISTIC VALUE-BASED EDUCATION
IN AN INTERCULTURAL/ INTERNATIONAL HORIZON.

WITH AN INTERNATIONAL SYLLABUS (THE I.B. FROM GENEVA).
(To be formally proposed; informal interaction already going on.)

BLENDING IN DEPTH THE WEST AND THE EAST,
INTELLECTUAL/ ACADEMIC PERFORMANCE
AND THE HUMANISTIC/ SPIRITUAL QUEST.

AN INTERCULTURAL SYNTHESIS OF MAJOR PHILOSOPHIC SCHOOLS AND
PEDAGOGIC SYSTEMS FROM INDIA/ ASIA AND EUROPE/ AMERICA;

AN INTERDISCIPLINARY SYNTHESIS OF EDUCATION, PHILOSOPHY,
PSYCHOLOGY, SCIENCE AND SPIRITUALITY.

UNFOLDING THE MULTI-DIMENSIONAL NATURE OF HUMANITY.

MERGING ACADEMIC EXCELLENCE AND THE INNER BEING,
SCIENCE AND SPIRITUALITY, THE SPIRITUAL AND THE MATERIAL.

THROUGH A CHILD-CENTRED AND VALUE-BASED PEDAGOGY,
SELF-LEARNING AND SELF-INQUIRY TOWARDS SELF-REALIZATION.

KNOWING THAT THE KEY LIES IN CONSCIOUSNESS:
THE TRANSFORMATION OF HUMANITY TOWARDS
HIGHER STATES OF CONSCIOUSNESS AND VIBRATION.

THE PEDAGOGY OF QUANTUM PHYSICS AND NEW SCIENCE
IN DIALOGUE WITH SPIRITUAL PHILOSOPHY AND WISDOM:

A NEW HOLISTIC PARADIGM AND A NEW HUMANISM.

TOWARDS THE UNITY OF MANKIND AND A NEW WORLD.

The very presentation of the Project already tries to be integral, expounding the scholarly contents in clear pedagogic ways and also through a beautiful artistic format that already conveys the message by itself.

The 1200 pages book that fully develops the Project in detail constitutes a whole treatise and encyclopaedia of the new holistic paradigm and integral education.

There are summaries and shorter presentations from 500 to 2 pages.

International Education for a New World.

FOUNDER: Prof. Dr. Albert Ferrer.
UNDER THE GUIDANCE AND BLESSINGS OF
Sri Sathya Sai Baba,
And the counsel of Prof. Dr. Raimon Panikkar.

A Project elaborated between 1997 and 2018
In India, Europe and North America.

LEGAL COPYRIGHT (India/ Catalonia/ International Convention of Berne):

The first copyright application has been accepted on November, 24th 2011 by the Copyright Office in Delhi with number 13821/ 2011-CO/ L. (Registered).

Six files have been presented at the Ministry of Culture of the Government of Catalonia (all registered): 02/ 2013/ 869, 02/ 2013/ 587, 02/ 2014/ 1622, 02/ 2014/ 3492 (the four of them being handbooks), 02/ 2014/ 3519 (shorter presentations) and 02/ 2015/ 2624 (full 1200 pages book in three volumes).

BRAND NAME/ TRADEMARK: in process by the legal firm Universal Legal (India/ USA) under the Numbered Representations from the Trade Marks Registry (Mumbai): 2285949 (class 41)/ 2285950 (class 45)/ 2285951 (class 41)/ 2285952 (class 45) with date February, 20th 2012.

Project: (PROF. ALBERT FERRER'S)
INTERNATIONAL EDUCATION FOR A NEW WORLD.

Institutes: SAI INTERNATIONAL SCHOOLS AND COLLEGES
SAI VOCATIONAL SCHOOLS/ SAI LOCAL SCHOOLS
INTERNATIONAL INSTITUTE OF HIGHER STUDIES FOR THE UNITY OF
THE WEST AND THE EAST, OF SCIENCE AND SPIRITUALITY.

Motto: From Academic to Human Excellence. Blending East and West.

MODALITIES TO ADOPT THE PROJECT through trademark steward/ licence:

- For investors/ sponsors wishing to establish new campuses through this Project in the frame of their own organization.
- And for existing schools/ colleges wishing to adopt the Project towards their pedagogic enhancement.
- The Foundation/ trademark steward established by the author/ owner of the trademark might have its own model schools or colleges.

The Project is open to a flexible adaptation according to the context and the requirements of any organization interested in its essential message and principles.

THE DIFFERENT PROGRAMMES FORMING THE PROJECT “INTERNATIONAL EDUCATION FOR A NEW WORLD”.

(Any organization can start with any particular programme
For any particular institution or area of work.)

➤ CREATION OF NEW CAMPUSES.

- Sai International Schools.
- Sai International Colleges.
- Sai Vocational Schools./ Sai Local Schools.
- International Institute of Higher Studies for the Unity of the West and the East, of Science and Spirituality.

➤ ADOPTION BY EXISTING EDUCATIONAL INSTITUTES.

➤ PEDAGOGIC ASSISTANCE TO SCHOOLS/ COLLEGES.

➤ TRAINING OF TEACHERS.

➤ COLLABORATION WITH GOVERNMENTS/ INTERNATIONAL ORGANIZATIONS.

➤ ACADEMIC RESEARCH AND PUBLICATION.

➤ MASS COMMUNICATION THROUGH THE MODERN MEDIA.

➤ CINEMA. PROJECTS OF FILMS.

**ADOPT OUR PEDAGOGY
TO ENHANCE THE EDUCATIONAL STANDARDS OF YOUR SCHOOL.**

- Your school can be inspired by our educational programme whichever is the syllabus of official affiliation in India (State-board, CBSE, ICSE/ ISC, IGCSE or IB) or in any other country.

DIFFERENT FORMS OF PEDAGOGIC ASSISTANCE:

- Educational counselling for the direction of the school.
- Training of teachers towards conceptual education and academic excellence.
- Introduction of education in human values towards an integral or holistic pedagogy.
- Provision of pedagogic materials.
- Participation in educational networks to share information and expertise.
- Model classes with the children of your school given by our own coaching team to inspire your staff.

OUR VISION.

- From the robotic system to conceptual education and **academic excellence** directed towards understanding, learning how to learn, free thinking, creativity and self-expression.
- From academic to **human excellence**, with ethics, human values, sensitiveness, self-inquiry and the blossoming of the inner spiritual dimension.
- From national/ religious/ social divisions to intercultural and inter-religious dialogue, solidarity, international understanding and **the unity of mankind**.

OUR MISSION IS TO:

- Spread through the entire world **an integral, value-based and humanistic pedagogy** on spiritual grounds that blends academic and human excellence, the left and the right brain hemispheres, the West and the East;

With a genuine spiritual inquiry from within through relation and dialogue unfolding human transformation towards higher states of consciousness and vibration, always in an international atmosphere under the ideal of human unity.

- Contribute to the development of the **new holistic paradigm** already outlined with the advent of quantum physics/ new science in dialogue with the traditions of spiritual philosophy and wisdom;

Hence, foster the unity of science and spirituality, the spiritual and the material, putting forward a unified theory of knowledge and an epistemology coherent with a holistic pedagogy, and ultimately, a new Humanism.

- **Face and redress** the present **crisis of boys' education** and alienation of boyhood while also caring for girls in a vision of harmony of the whole.

HIGHLIGHTS OF THIS EDUCATIONAL PROJECT:

Why is this Project so unique?

Never before its characteristics have been put together.

- It offers a profound **philosophical, psychological and scientific foundation** for integral education with scholarly standards and academic rigour;

While shorter presentations for a wider public are also available.

- It offers **a comprehensive pedagogic practice** ready to be implemented in any existing institute or in a newly created school,

Which, far from constituting a rigid system fixed once forever, is flexible and open to research, innovation and creativity,
Knowing that holistic education is a dynamic process like Life itself.

- It deeply blends the best contributions from **Europe/ the West and India/ the East** through an open diversity of sources of inspiration (sages and philosophers),

In a totally international horizon and genuine **intercultural dialogue** towards the unity of mankind.

- It deeply blends **science and spirituality** in the line of the historical dialogue between quantum physics/ new science and the traditions of wisdom/ spiritual philosophy towards **a new humanism** and **a new holistic paradigm**, that is, an integral world view interweaving the spiritual and the material.

This is not the realm of religious organizations, with our respect for all of them, but rather that inner dimension unfolding through free self-inquiry towards self-realization.

- Far from aiming at an elite, it aspires to reach a wider spectrum of the population,

With **social sensitiveness** imbued with love and compassion, and hence, an earnest effort to implement educational policies for the most needed sectors of the society while contributing to raise the educational standards.

In strictly pedagogic terms, this Project is also original and quite unique:

- By offering an **innovative school organization** divided into academic mornings and holistic afternoons devoted to the other dimensions of the human being.
- By offering a comprehensive and truly integral **pattern of workshops** in the afternoons to cultivate all the facets of humanity;
In a flexible spirit, however, open to innovation and research, and centred on the creativity of children through the concept of the project.
- By offering a **middle path between** the two historical extremes of total **segregation** and total **coeducation** that acknowledges the anthropological differences in learning within a common campus with spaces of interaction.
- By integrating in a harmonious way the best contributions from **the main schools of educational philosophy**: Philosophical Idealism in dialogue with Existentialism, Naturalism, Realism and Pragmatism.
- By putting forward a **middle path in education** that avoids all sorts of extremes encountered through the history of education;
And in particular, by putting forward a middle path in the crucial matters of freedom versus discipline, freedom versus protection of the child.
- By implementing the highest contributions of **Western and Eastern Humanism** into the educational process,
Through a **child-centred** and **value-based pedagogy** that discloses the uniqueness of every child from inside, blending academic and human excellence, the left and the right brain hemispheres.
For this, the Project proposes **an original five-fold holistic pedagogy** unfolding all the domains of humanity:
 - The physical dimension and the relationship with the environment;
 - The relational dimension, ethics/ human values;
 - The intellectual dimension with true academic excellence;
 - The aesthetic dimension with emotional education and art-therapy;
 - The inner or spiritual dimension through free self-inquiry.

This is the first attempt to combine the most prestigious international syllabus (International Baccalaureate from Geneva) and the most profound integral education in human values from India (Sri Sathya Sai Educare, etc),
Fine academic training, sound holistic education and spiritual self-inquiry,
blending the best from the West and the East.

**A theoretical/ practical model of integral education:
From an ideal school (and the creation of new schools in this horizon)
To a pragmatic adaptation to any educational space.**

This Project presents an innovative design for **an ideal school**, and we can certainly try to implement it through the development of a new campus, though we must humbly acknowledge that any human endeavour will only constitute a sincere attempt striving for genuine integral education.

Hence, the Project is an invitation **to create new schools** developing its pedagogic proposal in a comprehensive faithful way.

Nevertheless, the practical implementation will have to be wisely **adapted to the cultural context** of every particular civilization, country, region and local area.

Still, Westerners may learn many pedagogic ideas from India, and Indians from the West; **intercultural dialogue** lies at the core of this Project.

At the same time, our educational project can be **transported to any existing school/ syllabus** towards its pedagogic enhancement.

What we present here would be **an educational model** essentially open and flexible, to be adopted with pragmatism and to be adapted with wisdom to the context of any existing school. We do not believe either in dogmatism or absolutism.

A newly created school could integrate our model in a more comprehensive faithful way (in coherence with the IB), but any school anywhere in the world can take it as a theoretical/ practical model that can serve as a source of inspiration to implement any facet helping this particular school to improve its pedagogic practice.

In Government schools, for instance, it is virtually impossible to introduce global changes; but it is perfectly possible to open small prudent wedges slowly developing towards integral value education.

Also, we must stress that **the theoretical and the practical dimensions cannot be dissociated**. As Vedantic and Buddhist philosophies have clearly emphasized, **intention –or consciousness- is the key**, something that quantum physicists would also acknowledge. For instance, the practical tools of inner work applied to education are void or useless without the adequate intention. According to what is the state of mind, the results can be very different.

Here, **philosophy of education** becomes crucial for the educational practice as a guideline that may furnish an invaluable orientation to teachers. If we do not understand in depth the real purport of integral education, what will we implement?

From this point of view, **the training of teachers –not only academically-** will be decisive in holistic education, together with the relation with parents/ families and the interaction with all the systems affecting the educational process. Integral education can only be systemic. Education is interwoven with culture and society, and constitutes the best reflection or mirror of any civilization.

Education for the XXIst century.

Project of

SAI INTERNATIONAL SCHOOLS AND COLLEGES.

Initial campus/ model school:
Preferably in Puttaparthi (South India).

However, the Project is open to a diversity of locations.

In the line of a new era of peace, cooperation and unity, we propose:

A UNIQUE KIND OF INTERNATIONAL CAMPUSES.

- Model International Schools to inspire the entire world towards integral humanistic education in a spirit of brotherhood of mankind.
 - Including an Arts Section for children with an artistic vocation.
- Offering a Vocational School for children who will not pursue an academic syllabus till the end and prefer a practical profession.
- Developing into pioneering Colleges towards the new holistic paradigm.

Always blending academic excellence and human values,
Science and spirituality,
The West and the East.

SAI INTERNATIONAL SCHOOLS.

Not for an elite but for a wider spectrum of the population.

The uniqueness and special value of this new educational venture lies in blending five major factors that have never been integrated in depth until now:

- The best **conceptual education** incorporating the finest **academic excellence**, directed towards understanding, critical/ creative thinking and self-expression, and stimulating interdisciplinary skills in a vision of unity of knowledge, without neglecting any child, and recognizing the multiplicity of geniuses and the uniqueness of each child or human being.
- A **holistic approach** based upon **integral education**, offering a whole life style in the line of sustainable living, and ultimately pointing at **the new emerging paradigm** and the unity of science and spirituality.
- The most beautiful **humanistic traditions from Europe/ the West and India/ the East**, underlining the sacred dignity of the human being and the unique value of everyone, in solidarity with all beings and the cosmos entire; hence, the most profound **education in human values** and **spiritual inquiry**, unfolding the universal human values from inside as a solid foundation for ethics, and guiding the process of self-inquiry towards self-realization, under the enlightening inspiration of mystical philosophy and wisdom in all spiritual traditions of mankind.
- A prestigious and genuine **international curriculum** (the **International Baccalaureate** from Geneva, Switzerland), to which we will apply, in a truly **international atmosphere** with students and staff from all around the world, building the bridge between the West and the East and promoting the brotherhood and unity of mankind.
- A **sensitiveness for social justice**, charging **moderate fees** compared to the average cost of international and public schools (through an adequate sponsoring), and implementing **altruistic service** to others, the most needed and society.

* Sai International Schools will have beautiful and well-equipped campuses of international standards, showing a middle path between the extremes of luxury and precariousness.
* They will offer hostel accommodation for students having their families far away, although we will also welcome day scholars staying with their parents.

* In order to avoid the typical school buildings that look like corporate headquarters, **our schools will be split into smaller units of a more human size** corresponding to the major age groups (primary, middle and higher secondary) for boys and girls respectively, which means that Sai International Schools will be built as a compound of six villas following the traditional or classical patterns of the country or region harmoniously disposed around common gardens.

* Every unit will have a maximum of three classrooms per academic standard, and **each classroom will ideally count around 20 students** and even less if possible with **an ideal teacher/ student ratio of 1/ 10**.

* The schools will implement **a new educational policy regarding gender**. From the increasing awareness in the Western world about the problems produced by coeducation, our campuses will set forth complementary pedagogies for boys and girls based upon the anthropological differences in learning and growing up.
However, the boys' and the girls' schools can share common gardens and campus in a deeper vision of complementarity and harmony that will certainly develop through the XXIst century. The Project can also be implemented in separate boys' and girls' schools.

*In any case, we will create certain spaces for meeting and sharing between boys and girls –and also between elder and younger children-.

*All industrialized countries face **a crisis of boys' education and an alienation of boyhood** with so many forms of boys' violence, anti-social behaviour and academic failure. Both private organizations like the Gates Foundation and governmental authorities express their concern and start implementing **“recuperative masculinity politics”**.

In terms of syllabus, our schools will be preferably run within the framework of the **International Baccalaureate from Geneva**, complying with the required standards and fulfilling the prescribed syllabus, and hence, following the procedure for affiliation; while they will deepen into the underlying spirit of Geneva, which already aims at academic excellence understood in qualitative/ not quantitative terms, towards the development of the capacity of understanding, thinking, creativity and self-expression.

The International Baccalaureate (IB) also strives for integral education, and may be considered as one of the best syllabi in the world, certainly coherent with our project and highly suitable for any school implementing holistic education.

Under the guidelines of the International Baccalaureate, **Sai International Schools will be divided into three sections:**

- primary section (Primary Years Programme/ PYP),
- middle section (Middle Years Programme/ MYP),
- and higher secondary section (Diploma Programme/ DP).

At the same time, **the campuses will implement adequate pedagogies for boys and girls respectively that take into account the real anthropological differences between them.**

Nevertheless, this educational project can be adapted to any school or any syllabus. What we present here would be an educational model essentially open and flexible, to be adopted with pragmatism and to be adapted to the context of every school. We do not believe either in dogmatism or in absolutism.

From this point of view, **our pedagogy can also be implemented without any affiliation to an existing syllabus but rather by creating our own; then students will be prepared for public exams.**

Today, this option is much easier to implement with sites such as Tata, Vidya Vahini, the Khan Academy, etc, and similar settings created by the world top universities in the USA and other countries.

Furthermore, a free school like this can establish formal links with Open Universities/ Schools.

For higher secondary school or pre-university college,
The International Baccalaureate to which we will apply offers a two years special programme in the different fields of arts.

This **IB Art Programme** is divided into **four sections**:

- Visual Arts,
- Art/ Design,
- Music,
- And Theatre/ Performing Arts.

Sai International Schools will fully develop this IB Art Programme through its four sections.

Later on, students should be able to get graduate and post-graduate degrees in these artistic disciplines within the framework of the Arts Schools which should be part of the International Colleges.

➤ Hence, **our IB candidate higher secondary schools will be split into two main streams:**

- the more strictly academic **IB Diploma Programme**,
- and the **IB Art Programme** with the four areas mentioned above.

Even before 16, we will arrange a specific artistic education in any discipline for those children who show a special talent and vocation. Needless to say, our whole educational system will stress the pedagogic value of the arts for all students.

➤ From primary school until college, **art education in our institutes will incorporate a double dimension:**

- Our approach to art will always be **intercultural** and **international**, bringing students towards a comparative study of artistic disciplines in the major civilizations of mankind, and fostering the dialogue between the West and the East.
- Furthermore, art education in our campus will be **value-based**, which means that students will be invited to discover the fundamental human values and their spiritual foundation through a comparative history of art, and ultimately, to live and express human values and better know themselves through their own creativity.

The main service of our International Schools will be the sponsoring of vocational schools, which may be part of the international campus itself, hence offering three complementary streams –all equally worthy-: academic, artistic and vocational –each with its various sections-.

These vocational schools can serve as a model for the education of children who will not pursue an academic syllabus till the end.

- Manifesting the pedagogic aberration of academic imposition upon children who will never go to academic colleges.
- Proposing efficient alternatives to academic school failure and drop outs.
- Dignifying the manual professions, skills and crafts.
- And presenting a coherent pattern of education for the youths who will later perform this kind of jobs.
- The school must certainly prepare children for life and for society, but it is a technocratic bias to subdue the school to market criteria; first and foremost, the school must educate the human being as such –not only train a worker-.

These vocational schools will come into the picture after the primary section and the first years of middle school –between 14 and 16-.

While asking for very moderate fees, they will offer an efficient training with adequate teachers/ masters for a variety of crafts and professions, including some basic general knowledge, artistic expression, human values and spirituality.

The vocational schools can also be twinned with local schools following a regional/ national academic syllabus while implementing our integral value-based educational philosophy.

Our campuses will also try to have **a programme of scholarships**, so that some children whose parents cannot afford the fees but who show academic capacities can join the International School –though, as stated above, **the fees of the international syllabus itself will be kept as low as possible in a non-profit policy-**.

Moreover, our international campuses shall bring their contribution to raise the educational standards of India and Asia, especially at the local level, through special programmes: from the predominant robotic system to conceptual education, and from academic excellence to integral education in human values.

It is our ambition to develop in a second phase these unique international schools into pioneering international colleges, offering education, arts, humanities, management/ social studies, and science/ technology.

The general scope of the International Colleges will be threefold:

- international understanding through intercultural dialogue,
- professional skills with ethics and values,
- and the unity of science and spirituality through the dialogue between quantum physics/ new science and spiritual philosophy towards a new holistic paradigm.

Our International Colleges will be totally devoted to the emergence of a new unifying theory of knowledge and this holistic paradigm for the future of mankind.

“Man’s achievements in the fields of science and technology have helped to improve the material conditions of living.

What we need today, however, is a transformation of the spirit.

All the education that we pursue today is secular.

No doubt, that is also necessary.

But, the real education is that which helps you to manifest your innate Divinity.”

Sathya Sai Baba.

Sai International Schools will soon develop into International Colleges.

This new kind of College will be focused on the following areas:

*** For Education; Faculty of Education:**

Philosophy of education and practical pedagogy, comparative education,
Integral/ holistic education and education in human values.

*** For the Arts; Arts School:**

Traditional fine arts, modern visual arts, design and media, music and dance, drama and performing arts.

The core of the Arts School being modern visual arts, design and media.

*** For the Humanities; Humanities College:**

Comparative philosophy, religion and civilization,
Cultural studies from a comparative perspective,
Intercultural and inter-religious dialogue,
Cultural/ publishing management,
Modern languages/ translation.

*** For Economics/ Social Studies; School of Business and Social Studies:**

Political sciences/ sociology, administration/ public policies, international relations,
Economics and management with human values.

*** For Science and Technology; Science College:**

In particular, the different branches of New Science.

Psychology: transpersonal psychology and Jungian psychiatry,
Para-psychological studies and research on subtle/ bio-energy,
Health: holistic medicine, energetic therapies, psychosomatic studies and education for health,
Physics/ chemistry: quantum/ new physics and relational theory,
Biological sciences: deep ecology and environmental studies,
Computer science with human values.

I. These Colleges will be totally **international**, both for the multicultural composition of staff and students and their foundational spirit.

This means that we will foster **the intercultural and cosmopolitan perspective** in all fields of knowledge.

II. Our Colleges will stress **the link between sciences and humanities in a holistic approach to knowledge and reality**, while they will encourage interdisciplinary training and research and a new unifying epistemology.

The Colleges will also develop the convergence of science and spirituality, which means the confluence of mystical philosophy and wisdom in all the spiritual traditions of mankind with the different areas of new science today.

This new holistic paradigm, beyond the limits of the former mechanistic model, will be the horizon of our Colleges, and an epistemological foundation for integral education in human values;

a new unifying theory of knowledge for the XXIst century, holistic in nature, at the junction of science, philosophy and spirituality,

supporting integral education in human values and a new humanism,

at the service of all human beings for the sake of their welfare and realization.

III. Therefore, our Colleges will stimulate **the introduction of human values in all academic subjects and in the different branches of science, culture and management**, while they will also promote sustainable living criteria in all the spheres of social life.

Sai International Schools and Colleges will try to be a genuine Forum or Agora.

This shall be a place for dialogue and exchange, with aperture of mind and freedom of thought and expression, where critical thought, however, does not indulge in negative criticism –as it has happened so often-, but becomes an instrument for self-realization in solidarity with all and everything.

Our institutes will try to set an example of **an open organization**, where the needed management is not to the detriment of the purity and depth of the vision, but allows, on the contrary, dialogue in freedom and the realization of everyone.

The students of our schools and colleges will grow up in this spirit of freedom of thought and self-inquiry, together with love and compassion for all, and a sense of service to our fellow beings.

This has always been the spirit of **Sathya Sai Baba**, like other spiritual masters before Him. The master has always stressed the central role of **Awareness**, which implies a free investigation into ourselves and around ourselves, in relation, dialogue and unity with others.

Profile of the Student of Sai International Schools.

We will earnestly try to educate human beings that:

- are conscious of the unity underlying diversity both at the human and cosmic levels;
- are open to intercultural/ inter-religious dialogue from their own culture and tradition;
- have an international frame of mind, and can be cosmopolitan citizens and global leaders;
- unfold the universal human values, like love and compassion, sensitiveness and tenderness, peace, etc, from that inner depth inside them, beyond the volatile nature of the mind and emotions;
- put a ceiling to their own desires, while being open to help their fellow human beings through altruistic service;
- perform their jobs and duties in society with competence, but also with ethical principles, values and a sense of responsibility and solidarity;
- perform their role in family and community with coherence and maturity;
- understand in depth and think freely (in analytical, critical and creative terms), while they are also capable of observing and changing themselves through an earnest self-inquiry towards self-realization;
- integrate in a harmonious way all the dimensions of the human being (physical, relational, intellectual, aesthetic and spiritual);
- honestly strive for their own transformation to be better human beings, to manifest the spiritual depth within, and to serve for the improvement of human society.

Our educational model.

THE MAIN FEATURES OF OUR PEDAGOGIC SYSTEM.

To be wisely adapted to the cultural context of every civilization, country and area.

➤ **Philosophy of education.**

- Integral or holistic education through a five-fold pedagogy unfolding the five fundamental domains of humanity: physical/ environmental, communitarian/ relational/ ethical, intellectual/ rational, aesthetic/emotional, and spiritual.
- In the horizon of the historical dialogue between quantum physics/ new science and the traditions of spiritual philosophy/ wisdom towards the emergence of a new holistic paradigm and the unity of science and spirituality, academics and humanism.
- Preference for the International Baccalaureate in terms of syllabus (a new generation of international schools), although our pedagogic system can be implemented within the frame of any syllabus or independently.
- International atmosphere open to intercultural/ inter-religious dialogue while blending the best from the West and the East towards the unity of mankind.
- Inspiration upon Sathya Sai Baba and other sages/ educationists of the West and the East, such as Swami Vivekananda and Vedanta, R. Tagore, Sri Aurobindo, J. Krishnamurti, Plato and Neoplatonism, Kant, Rousseau, Pestalozzi, Froebel, Goethe and Romanticism, Hegel, Emerson, Thoreau, R. Steiner and Theosophy/ Anthroposophy, Montessori, Dewey, Kilpatrick, etc.
- Foundation upon Humanism and Philosophical Idealism in dialogue with the other major schools of educational philosophy: Existentialism, Naturalism, Pragmatism and Realism.
- Proposal of a middle path in pedagogy avoiding all extremes –in particular regarding the matter of freedom versus discipline, freedom versus protection of the child-.
- Social sensitiveness, trying to charge moderate fees and to offer scholarships, while sponsoring vocational schools virtually free of cost and contributing to raise the educational standards –especially at the local level-.

➤ **School structure.**

- In order to avoid the typical architecture of modern schooling with large dehumanized buildings, our schools will be split into six smaller units of a more human size following the major age groups: primary, middle and higher secondary for boys and girls respectively.
- Non coeducation: different boys' and girls' schools in the same campus and sharing common gardens, though separate schools are also possible; complementary pedagogies taking into account the anthropological differences in learning and growing up in a vision of deeper harmony of the whole.
In any case, we will create certain spaces for meeting and sharing between boys and girls –and also between elder and younger children-.
- Ideal number of students per classroom: around 20 –even less if possible-.
- A maximum of 3 classrooms per academic standard.
- Ideal teacher/ student ratio: around 1/ 10.
- Our schools shall welcome both day scholars and residential students depending on the distance between school and home: hostel available from Monday to Friday only (going back home for the weekends) or for the whole week including weekends.
- Residential students will be allowed to go back home for short holidays within the semester, and parents will be invited to visit their children too.
- We acknowledge that parents are the first educators, and for the sake of the children the schools will keep in close contact with the parents/ families, to whom the schools will also offer special workshops and activities.
- A special programme will be arranged for hostel members so that they grow up happily and feel like at home; each hostel will have its own name and character, and will be run by the students themselves in a spirit of brotherhood (any form of ragging will be strictly prohibited).
- In the school canteen, the food will be vegetarian in India, and in Western countries for those who wish it; always of high quality and hygiene, and balanced through an international multi-cuisine menu.
- For day scholars, lunch at school will be compulsory.

The boys' school will have male teachers though it may also have some female staff;

The girls' school will have female teachers though it may also have some male staff.

It is anthropologically evident that boys do need a positive male role model to grow up.

➤ **School organization.**

- The morning session shall commence after a school assembly with community singing, quotation and a short presentation by a student.
- Original school organization divided into academic mornings and afternoons devoted to the other domains of humanity and education through a comprehensive set of workshops.
- The lecture method and other forms of group teaching must be combined with personalized tutorials directed towards free thinking and self-learning.
- Academic tutors will be complementary to the personal guardian.
- The afternoon workshops will be open and flexible, and will be centred upon the project (with self-learning and the creativity of the student).
- At the end of the afternoon workshops, the school day will be closed by daily practice of sports, games, free playing and gardening –with some time for the dialogue with the personal guardian-.
- Weekend/ holidays Clubs managed by the students themselves in order to develop the afternoon workshops.
- Evening functions, school/ cultural days and performances throughout the year allowing students to offer their works and creativity.
- Celebration of seasonal festivals from an intercultural perspective.
- Holiday outdoor activities such as hiking, trekking, etc, in hills areas.
- Gardening and contact with animals and Nature.
- Organization of groups of Boy Scouts and Girl Guides within the school premises. All students will be scouts/ guides, though the school shall offer two levels of commitment: basic (for all) including the oath and community service, and full (for those who want to develop scouting in depth).
- All students shall participate in social/ community service in ways appropriate to their age under teachers' supervision.
- Positive values, social/ management skills and leadership with wisdom.
- The school shall distribute tasks to the children and strengthen their autonomy, responsibility and maturity in a spirit of cooperation.
- Students will take care of their own classroom, which they will consider as their Vidyalaya –house of knowledge-.
- They will also share some responsibility on their dormitory/ hostel.
- The school clubs for weekends and holidays will be run by them with teachers' assistance.
- Students shall act as assistants to teachers and monitors to their mates.
- Elder children will perform some pedagogic role towards the younger.
- All students will participate in the School Parliament and the campus life.
- The school culture will bring students to see their mates as brothers and sisters in a spirit of community life.

➤ Pedagogic methods.

- Our educational system will try to cleanse the syllabus from an excess of information: from quantity to quality of education; conceptual education directed towards understanding, curiosity, research, free thinking, problem solving, imagination, creativity and self-expression –which means self-knowledge and self-realization-.
- Our schools will reinforce the capacity of the student to learn how to learn, do research and investigate by himself or herself: active learning.
- The pedagogic practice will always be child-centred, unfolding the uniqueness of every child and recognizing the multiplicity of geniuses.
- The pedagogic practice will also be value-centred, manifesting human values through academics and cultural history in a comparative perspective East/ West, and ultimately, unfolding the fundamental human values from within.
- Moreover, school life will promote the Socratic dialogue/ dialectic method with active participation of the student through dialogue and discussion. The whole educational process in the academic morning as well as the afternoon workshops must be Socratic towards self-learning and self-realization.
- With due respect to mechanistic science and its proper role, our schools will cultivate the new fields open by quantum physics and other branches of new science in the horizon of the unity of science and spirituality and a new holistic paradigm;
- While they will encourage curiosity, imagination, creativity, a passion for exploration and knowledge, and free research/ investigation.
- Emphasis on team work and interdisciplinary bridges, breaking rigid boundaries between subjects and disciplines, and nurturing a relational mind open to interdependence and interconnectedness.
- Our schools will acknowledge the importance of story-telling and playing –in particular free playing- in the process of growing up; hence, play-way methods will be displayed in primary school, though middle school students will also be able to fulfil the playing nature of the young adolescent through other ways –inspired by scouting for instance-. We will encourage free playing too, avoiding an overwhelming presence of the adult.
- Without dismissing the pedagogic role of the adult and his dialectical relationship with the student, we will foster experiential methods (direct experience) and self-learning/ exploration of the child through a wise middle path that avoids the extremes that the history of education has encountered.
- Our schools will always take into account the specific needs of the main age groups, by respecting the anthropological features of each group under the inspiration of educationists such as Steiner, Montessori, Piaget or Dewey. In some contexts, however, it will be good to mix the age groups.

➤ **Evaluation and discipline.**

- Continuous evaluation system avoiding academic pressure, including qualitative assets – not only quantitative- and regarding the child as a whole and a human being.
- Our schools will avert tests and mechanic procedures of evaluation, putting forward evaluation tools that foster self-learning and active participation, free thinking, creativity, imagination and self-expression, such as: projects (individual and collective), research, direct experience, inductive/ experimental methods, problem solving, case study, commentaries, compositions, summaries, essays/ dissertations, oral presentations, manual works, performances, etc.
- Students should produce their own illustrated summary of coursework in primary and middle school, and more academic coursework later.
- Our schools will be run on the double principle of love and discipline: without love discipline becomes authoritarian; without discipline love becomes chaotic.
- Aiming at qualified freedom –under the adult’s caring guidance that never becomes overwhelming and pursues the child’s blossoming from within-.
- Aiming at self-discipline of the child –which requires less external methods of control-. Students will collaborate in the campus discipline.
- To the maximum reasonable extent, we will uphold the self-education of the child and self-learning, so that the student is active rather than passive.
- Under the inspiration of J.-J. Rousseau, our educational system will confront the child with the consequences of his or her deeds.
- Any form of correction will never be to the detriment of the respect for the child and his or her dignity, and will always intend to be pedagogic towards a positive transformation of character: instead of reprimanding, criticizing or punishing, emphasizing positive values, qualities and actions, and also confidence/ self-esteem together with social skills in a spirit of unity.
- We should temper external coercion as much as possible, trying that the needed discipline never becomes repressive whereas it is transformative.
- Physical punishment –still common in India/ Asia- will be totally prohibited.
- There is a profound link between Kant and Romanticism, and this bridge opens to the spiritual masters of India, especially in the millenary lineage of Vedanta. It is well-known that external coercion does not work on the long term. Ethics and human values must come from inside.
Here coincide Kant’s ethics and Sathya Sai Baba’s education in human values –in coherence with Swami Vivekananda, Tagore or Sri Aurobindo-.
Our schools will try to fulfil the Enlightened dream of human dignity and emancipation; knowing that spiritual philosophy and wisdom represent the culmination of Enlightenment and Humanism.

➤ **Integral/ holistic education.**

- The physical dimension including education for (holistic) health.
- The importance of Nature and the contact with the environment.
- Community life; relation and dialogue.
- Capital role conferred to the Arts (classical fine arts, modern visual arts, crafts, music, dance and drama) developing: aesthetics, the sense of beauty, sensitiveness, emotional intelligence, creativity, imagination, positive transformation (art-therapy) and self-knowledge.
- Equal importance given to the Humanities, Philosophy and Social Studies (with History and Geography), fostering research, curiosity, self-learning, free/ creative thinking, the capacity to learn by oneself and self-expression together with tolerance and aperture of mind –the best antidote to prejudice and fanaticism-; from GK to the knowledge of human condition.
- Though our schools will not neglect indigenous cultures, popular culture or more recent contributions, they will underline the value and pedagogic potential of classical culture in a comparative perspective East/ West.
- Our schools will also recover the educational role of classical languages.
- Incorporation of human values (direct teaching/ comparative);
- While studying the main traditions of spirituality and philosophy with respect for the faith of every student or teacher.
- Direct practice of inner work towards self-knowledge and self-realization in a spirit of free inquiry and dialogue: relaxation, meditation, yoga, etc.
- Emphasizing the central role of consciousness in the process of self-inquiry and self-realization in order to manifest the spiritual depth within.
- Stressing the significance of relation and dialogue in this process; organization of groups of dialogue towards a culture of dialogue.
- While respecting all religious traditions, our schools will make the difference between organized outer religions and a free interior spirituality.
- The schools will avoid the recreation of systems of beliefs and dogmas, promoting freedom of thought and Socratic self-inquiry in dialogue.
- In the horizon of the quantum integration of science and spirituality towards a new holistic paradigm.
- The main goal of education is the transformation of the human being towards higher states of consciousness and vibration.

➤ **School life.**

- School uniform for boys and girls which will change from primary to middle and finally higher secondary.
Classical look but no jackets/ ties; no shoes for India (we are in a tropical country).
British style for the classes (polo t-shirt like Oxford/ Cambridge colleges),
More traditional attire for the evening and for special occasions (Kurta pyjama in India);
schools in Western countries will find equivalent forms of clothing.
- Though we will take special care of the hostel life, the whole school will offer a community life with a certain ethos or atmosphere imbued with values and the double pillar of love and discipline.
- Every student shall freely choose a teacher who will act as a personal guardian in the spirit of the Gurukula (master/ disciple relationship). The guardian will be complementary to academic tutors.
- Elder students shall also take care of the younger ones through a loving guidance as also practised by the ancient Gurukula.
- Our educational philosophy will acknowledge the importance and significance of initiation in the process of growing up, especially for boys, something well studied in anthropology though dramatically lost in the modern age; under the inspiration of modern movements like scouting, our pedagogic system will try to recreate adequate rites of passage to come of age –basically through the scout oath and ritual-.
- Our campuses will hold a School Parliament enhancing democratic culture and citizenship with students' participation and regular feedback from them.

Our schools should be living laboratories of integral education towards the new holistic paradigm,

A Vivarium, living hubs or clusters,

With teachers' training, information for parents and activities for adults in general,

With community links in a systemic approach.

➤ **School environment.**

- Our schools will do their best to utilize alternative sources of energy and ecological criteria in the line of sustainable living.
- The architecture of the schools will not follow modern concrete/ glass design, but rather traditional or neo-classical patterns from Western or Eastern cultures together with the principles of sacred geometry.
- Our schools will also take special care of their gardens, trying to incorporate water in the landscaping –at least some fountain-, and always stimulating children to cultivate the relationship with the environment.
- The schools will make a sensible use of classical music in many facets of the campus life.
- Ultimately, they will offer a happy environment to the children, with cheerful colours, and a sense of beauty and serenity.
- The campus itself should incorporate some playing areas with children's park and scouting constructions.

Integral education is ultimately pure philosophy in its etymological meaning:

PHILIA SOPHIA,

The love of wisdom or the wisdom of love,

When knowledge and love are inseparable,
When the sense of unity, beauty and joy unfolds from inside,
When our Self is One with That living in each and everyone.

In this philosophical horizon,
Our Project can only be a frame or a source of inspiration,
Never a rigid system fixed once for ever;
Instead, it is open to flexibility, innovation and creativity,
Flowing like the very rhythm of Life.

Child-centred strategies and self-learning.

- Optional subjects beyond the basic compulsory.
- Self-learning approach in the afternoon workshops allowing the child to build his/ her own curriculum and unfold his/ her own talent and vocation.
- Crucial role of the project among the evaluation tools -not only for the afternoon workshops but also for the morning academic subjects-.
- Other forms of evaluation fostering research, thinking, creativity and self-expression: composition, commentary, essay, oral presentation, etc.
- Pedagogic methods evolving direct experience and self-learning –under teachers’ guidance-; Socratic dialogue towards self-realization.
- Personalized tutorials, guardian, and monitoring from elder students.
- Nurturing emotional intelligence through the arts, human relationship and community life –in hostel and in the general campus life-.
- Self-knowledge and self-expression through the arts and humanities.
- Self-knowledge through self-inquiry and spiritual awakening with proper guidance – through relation and dialogue-; consciousness and energy.

Value-based strategies and spiritual awakening/ awareness.

- Direct teaching of human values and spiritual teachings through all the traditions of wisdom of mankind; a diversity of value-based tools.
- Value-based perspectives in the academic and artistic subjects.
- Value-based ethos in the whole community life.
- Accompanying the growing child through an inner process of self-inquiry towards self-realization: cleansing of inner blocks and self-knowledge, unfolding the deepest spiritual nature and human values from within.

The artistic education must include.

- Training in the techniques of the different artistic disciplines.
- General knowledge of the artistic traditions in an intercultural perspective –as a profound source of inspiration too-.
- A value-based approach evolving human values through the arts.
- Direct practice towards self-knowledge and self-expression; art-therapy and the Socratic/ transformational potential of art.
- The cultivation of emotional intelligence, the sense of beauty and the aesthetic taste towards higher states of consciousness.

Academic instruction must provide:

- Basic facts and concepts, general knowledge and intellectual skills or tools.
- Together with the fundamental capacity to investigate, learn how to learn, innovate, think freely and creatively and express oneself –with values-.
- Team work spirit, and an interdisciplinary/ relational mind.

Sai International Schools:

A UNIQUE BLEND OF THE BEST CONTRIBUTIONS FROM THE WEST AND THE EAST, FROM MAJOR PEDAGOGIC SYSTEMS AND EDUCATIONISTS.

For instance, our schools will integrate in a coherent way:

- The International Baccalaureate, officially recognized, highly praised by universities and truly integral –product of sound comparative education-.
- The tutorials of British Public schools, Oxford and Cambridge.
- The Anglo-Saxon case study/ problem solving with team work.
- The project-based and experience-based pedagogies from North America.
- The finest conceptual education from France with its “apprendre a apprendre” –to learn how to learn-.
- Critical thinking with commentaries/ essays from Continental Europe.
- The Gurukula of India –the master-disciple ethos- and the Indian sensitiveness for inner work and spirituality.
- The Buddhist paths of self-inquiry with their own master-disciple traditions.
- The new holistic paradigm opened by quantum physics/ new science in dialogue with the traditions of spiritual philosophy and wisdom.

- The Socratic dialogue and the Platonic role of Philosophy.
- Rousseau’s interaction with Nature and the Romantic spirit.
- Kant’s autonomy of the subject and Hegel’s Bildung –dialectics-.
- Steiner’s emphasis on creativity/ imagination and the role of the arts.
- Montessori’s respect for the child and self-learning strategies.
- R. Tagore’s cultivation of the Humanities and Universal Man.
- Aurobindo’s Integral Yoga.
- Krishnamurti on relation/ dialogue together with the observation of oneself.
- R. Panikkar on intercultural dialogue and comparative mystical philosophy.
- Sathya Sai Baba’s human values approach and teachings of wisdom.

- Etc.

Sai International Schools.

SCHOOL ORGANIZATION:

- Mornings for the academic subjects.
- Afternoons for the other domains of integral education.
(Together with weekends).

Always through The Socratic Dialogue:

Instead of the teacher's monologue,
Overwhelming and blocking
Through an external imposition;
The Socratic teacher will suggest,
open the mind, listen to the child
And accompany him so that
He learns by himself from within
And learns about himself.

Without the adequate intention -a Socratic spirit and its educational philosophy-
Mere techniques and external arrangements will be void and useless.
Integral education is first of all a certain attitude and pedagogic relation.

SCHOOL ORGANIZATION (in more detail):

- The mornings will be devoted to the academic subjects, imparted through the 5 Academic Departments with their correspondent Heads of Department (English, Languages, Social Studies, Maths, and Science/ Technology).

Our educational programme will prefer the International Baccalaureate of Geneva (Switzerland);

However, our pedagogic method of integral education in human values can be implemented in any school whichever is the curriculum of affiliation or even independently from any syllabus.

- The afternoons will be devoted to the other domains of integral education, arranged through the 5 remaining Departments of the School (Fine/ Visual Arts, Music, Dance/ Drama, Human Values/ Inner Work, and Sports/ Outdoor Activities).

During weekends and holidays, students shall join in Clubs run by themselves and centred upon the afternoon workshops;

Our schools will also organize a number of functions, cultural events and special days throughout the year to allow the children to perform their own creation.

The afternoon workshops and the Clubs will encourage the creativity of students through individual and group projects.

➤ **Afternoon workshops (developing through Clubs).**

(Apart from sports, games, free playing, outdoor activities and gardening).

Always from an intercultural and value-centred perspective and through a child-centred pedagogy; students being assistants to teachers and monitors to their mates, and the elder taking care of the younger.

- Classical Fine Arts (Drawing, Painting, etc); gradually integrating History of Art.
- Modern Visual Arts (Photography, Cinema, Video, Graphics, Design, etc), with use of computers, image and sound studio.
- Both Classical and Modern Arts should incorporate complementary dimensions: aesthetics and the sense of beauty, emotional education, creativity, self-expression, and self-knowledge/ art-therapy.
- Handicrafts and Pottery: instead of Visual Arts for Primary School.
- Carpentry and Crafts: combined with Fine/ Visual Arts for Middle School.
- Music: allowing the selection of an instrument by the students, and organizing a Boys' Choir and a Girls' Choir (with School Orchestra).
- Dance. Not only for girls but also for boys (overcoming deeply-rooted prejudice against boys).
- Drama. Both dance and drama being combined through the academic year, one semester being devoted to dance and the other one to drama.
- Humanities, complementary to English/ Second Language in the morning academic subjects: focused on the capacity of free/ creative thinking and self-expression (oral and written) and communication skills; the study of thinking and expression through the history of philosophy, literature and art. Quality culture: general knowledge, feeding the mind and healing the soul.
- Comparative Study of the Spiritual Traditions of Mankind: religions and mystical schools in the past and today, with the presence of human and spiritual values through the history of philosophy, literature and art.
- Human values (direct teaching).
- Positive values, organizational skills and leadership with wisdom.
- Groups of dialogue.
- Relaxation/ meditation.
- Yoga or other practices of inner work.
- Introspection, self-inquiry and self-knowledge in relation and dialogue.

➤ **Afternoon workshops:**
Periods frame. (Flexible).

- Fine Arts:
2 periods/ week for the whole school;
gradually integrating History of Art.
- Visual Arts: 2 periods;
with use of computers, image and sound studio.
Both Fine and Visual Arts being combined through the academic year, one semester being devoted to Fine Arts and the other one to Visual Arts.
- Handicrafts and Pottery: instead of Visual Arts for Primary School.
- Carpentry and Crafts: combined with Fine/ Visual Arts for Middle School.
- Music: 4 periods for the whole school.
- Dance: 2 periods. Not only for girls but also for boys (overcoming deeply-rooted prejudice against boys).
- Drama: 2 periods.
Both dance and drama being combined through the academic year, one semester being devoted to dance and the other one to drama.
- Humanities, complementary to English and Second Language in the morning academic subjects: 1 period.
- Comparative Study and History of the Spiritual Traditions of Mankind: 1 period.
- Human Values (direct teaching): 1 period.
Combined with:
- Positive values, organizational skills and leadership with wisdom.
(Already present in many facets of the school life.)
- Relaxation/ meditation: 2 periods.
- Yoga or other practices of inner work: 2 periods.
Integrating:
- Introspection, self-inquiry and self-knowledge.
- Groups of dialogue.

Total: 15 periods per week;
arranged through 5 afternoons comprising each one 3 periods.

Although this is the ideal scheme (flexible) to provide integral education to our students, arrangements can be made to suit the particular talent and vocation of each child.

The afternoon workshops for integral education will not constitute a rigid scheme fixed once for ever; on the contrary, they will offer an open and flexible platform to implement in depth a holistic kind of pedagogy.

For this reason, each workshop will combine different kinds of activities from different perspectives and disciplines, in a spirit of genuine freedom and creativity, enthusiasm for education and love for the children.

Through the workshops, students will have the opportunity to act as **assistants** to teachers and **monitors** to their mates, while elder can take care of younger.

The workshops will allow children to build up their own curriculum while promoting self-learning, creativity, self-expression and self-knowledge.

The concept of **the Project** will be crucial not only for the afternoon workshops but even for the academic subjects.

The Project will be conceived as an exciting challenge for the students, an invitation to be creative and free, to build something from their own skills, interests and experience, always under the sensible and caring guidance of the teachers -who will gradually vanish and wisely bring the children towards self-learning and self-knowledge-.

In all the domains of integral education, and very especially in relation to inner work and the spiritual dimension, our campus will be a living laboratory, promoting academic and scientific research, that will be published and shared through working groups, symposia, conferences, etc, contributing to the expansion of integral education in the world and the emergence of a new, holistic and truly humanistic paradigm.

**SCHOOL SCHEDULE: (May be adapted to the context.)
(Flexible)**

In Hostel (before Assembly):

- 6:00 AM: waking up and getting ready
- 6:15/ 6:30: prayer (inter-religious)/ meditation
- 6:30/ 6:45: physical exercise
- 6:45/ 7:45: teeth-brush and school uniform
- 7:45/ 8:15: breakfast
- 8:15/ 8:30: getting ready for Assembly

The whole School (residential and day scholars):

- 8:30/ 8:50: Assembly: chants/ prayer (inter-religious)/ meditation and student's presentation
- 8:50/ 9:00: getting ready for morning school
- 9:00/ 9:45: 1st period (academic) (integrating group teaching and tutorials)
- 9:45/ 10:30: 2nd period (if needed: some tutorials in the afternoon/ evening)
- 10:30/ 10:45: break
- 10:45/ 11:30: 3rd period
- 11:30/ 12:15: 4th period (breaks can be used for relaxation/ meditation, short educational games or free playing)
- 12:15/ 12:30: break (Some minutes of relaxation/ play-way tools can be used before the periods and also through consolidated periods)
- 12:30/ 1:15 PM: 5th period
- 1:15 PM/ 2:00 PM: lunch
- 2:00/ 2:45: 1st period (integral education)
- 2:45/ 3:30: 2nd period (through workshops/ projects)
- 3:30/ 4:15: 3rd period
- 4:15/ 4:30: getting changed (sports uniform)
- 4:30/ 5:30: sports/ games or gardening (student's dialogue with his guardian)
- 5:30: residential students go to hostel, day scholars back home

In hostel after sports/ gardening:

- 5:30/ 6:15: shower and getting changed (evening uniform) with snacks
- 6:15/ 7:15: homework
- 7:15/ 8:00: dinner
- 8:00/ 9:00: study/ activities/ free time
- 9:00/ 9:30: meeting in the common room with a short prayer
- 9:30/ 10:00: getting ready for sleeping with teeth-brush
- 10:00 PM: lights off
- One extra-hour for study may be arranged for elder students if needed

Special evening timings for Younger Hostel (Early Primary):

- Evening activities: only half an hour, till 8:30 PM
- No meeting in the common room (only from 4th standard)
- 8:30/ 9:00: getting ready for sleeping with teeth-brush
- 9:00 PM: lights off

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- **Periods can be consolidated** in flexible ways according to the pedagogic needs, especially the two sets of consecutive periods in the morning session. Schools can explore the possibility of devoting each morning to one main academic subject (First/ Foreign Languages, Social Studies, Maths, Science) to go in depth into the subject in creative ways. Apart from the two longer breaks, consolidated periods require pauses of several minutes. We must organize longer coherent periods with internal breaks in order to unfold **the learning experience** in depth: I. Absorption, II. Assimilation, III. Re-expression. (Cf educational neuroscience among the tips for integral education.)

In the academic session, the lecture method and other forms of group teaching must be combined with **personalized tutorials** directed towards free thinking and self-learning while nurturing the autonomy and maturity of the student. Academic tutors –so important in British Public Schools and Oxford/ Cambridge- will be complementary to the **personal guardian** –in the spirit of the Indian Gurukula-.

In the evening workshops, periods can also be consolidated to have more time for the development of artistic training or inner work activities.

Then, every afternoon may be taken up by one of the five departments for integral education: Fine/ Visual Arts, Music, Dance/ Drama, Inner Work.

- The Science and the Sports/ Outdoor Departments can organize various activities such as **observation of Nature** or **direct experience** (apart from the sports/ games periods between 4:30/ 5:30 PM).
- **For the younger children**, some special time for rest can be arranged taking into account the biological needs of the age group or any particular child.
- The evening workshops can easily provide opportunities **to mix children from different age groups** –which is highly educational-. Then, the elder students can take care of the younger while acting as monitors to their mates and at the same time as assistants to teachers. The evening workshops can also be more suitable for **self-education** in a **child-centred pedagogy**, so that the student builds his or her own curriculum to some extent through creative methods and evaluation. Even the academic mornings can encourage students to be more active in their own educational process, especially through projects and creative ways of assessment, while also acting as teacher assistants and mates monitors.
- The evening workshops, week-end clubs, evening functions, outdoor activities or the service to the community can sometimes provide some spaces for meeting and sharing **between boys and girls**.

Our schools will always try to find a middle path between the extremes that the history of education has encountered:

- on the one hand, the mainstream school system of the modern age, with its rigid structure based on pure academics and lecture methods regardless of the child's nature and the integral dimension of the human being;
- on the other hand, progressive pedagogies that have sometimes brought the pendulum to the other extreme, with lack of limits or discipline, the dismissal of the pedagogic responsibility of the teacher, and an erosion of academics.

This middle path can be more easily trodden through a sensible combination of sound pedagogies from the West and the East, such as the International Baccalaureate, Steiner, Montessori, Dewey, Vivekananda, Tagore, Aurobindo, Krishnamurti, Sathya Sai Baba, etc.

In the academic morning session, students will remain in their own classroom, which they will take care of as their **Vidyalaya** –house of knowledge in Sanskrit-.

Teachers will come to every classroom from their respective department (English, Languages, Social Studies, Maths, Science/ Technology).

Hence, mobility through classrooms will be teachers' duty, not students'.

This pattern will save time for teaching, and will avoid the abstract mechanical utilization of anonymous rooms that do not belong to anybody.

Taking care of their own Vidyalaya –house of knowledge- will be by itself an educational tool in the hands of the children, nurturing positive values and responsibility, while being more implicated in their own educational process.

Integral education must question **the traditional structural inputs** –like the physical settings and the classroom- and explore new possibilities –including movable/ folding desks, various ways of organizing the classroom, and even some classes or tutorials in the gardens in contact with Nature-.

For this, our educational project already questions the common architecture of mainstream schooling and makes the case for a new school architecture.

EACH HOSTEL should avoid being a big building with all the dormitories;

Rather, it should be like a set of small cottages, nicely connected, containing each cottage one or more dormitories and other services.

Each dormitory cottage must have its own name and character, being like a small house for the children or youths.

Moreover, the hostel cottages will enhance the values of community life and brotherhood; for this, we will avoid double rooms or dormitories with less students.

Our schools and hostels will convert the traditional forms of bullying and ragging into positive values such as love, care, responsibility and maturity. Students will perform some tasks to take care of their own cottage.

There will be a teacher responsible for every cottage, acting as a house parent.

SATURDAY.

CLUBS.

(Recommended for day scholars/ compulsory for residential students).
Selected from the Integral Education Afternoon Workshops, namely:

- Fine Arts Club
- Visual Arts Club
- Handicrafts Club
- Music Club
- Dance Club
- Drama Club
- Yoga Club (to deepen into meditation, yoga and inner work)
- Sports Club
- Nature Club (gardening and farm)
- And finally, Alpine Club for outdoor activities, hiking and trekking.

The students will give a name to the club and will manage it themselves with the minimum assistance of teachers.

- Furthermore, the School will have special wings of **Boy Scouts and Girl Guides** that will basically operate on Saturdays with their social service activities.
- The School will also have its own **Boys' Choir and Girls' Choir with Orchestra**.

SUNDAY.

Free for residential students, though there will always be a sensible –not overwhelming- teachers' supervision.

Here, free playing will be encouraged. Day scholars can always join if they wish.

- According to the age and the needs, additional study time, tuitions/ tutorials and personalized attention may be arranged through the week-ends, especially on Saturday and even Sunday if necessary, not only for residential students but also for day scholars. The dialogue with the guardian can happen here too.
- Some Club/ Scout activities may sometimes take place on Sundays, though the Clubs and Scouts will try to concentrate their activities on Saturdays.
- The Sports and Games Area with the swimming pool will always be open for residential students and day scholars through the whole week-end, Saturday and Sunday.

The Boys' Choir will take lads between 7 and 15 years for the soprano/ treble and alto voices, and elder youths for the adult male voices.

It will follow the grand tradition of the British Chapel Boys' Choir and the continental Knabenchor, Maitrise or Escolania throughout the long history of sacred music from Gregorian Chant and Palestrina to Romanticism and B. Britten.

This tradition is virtually unknown in India and Asia; in fact, India ignores the uniqueness of boys' voices: whereas girls' voices are just young women's voices, boys' voices are not young men's voices but rather a third gender closer to the female though it has a unique purity of sound especially suitable for sacred music.

For these reasons, the Boys' Choirs of our Schools will be called to perform a special role in India and Asia while it can also remind Westerners of the musical and pedagogic value of this millenary tradition of Boys' Choirs coming back not only to the first Christian monasteries like Montserrat but even to Rome and Greece.

As it has become evident so many times in Western countries, Boys' Choirs can be an efficient tool to transform boys' alienation or troubles into positive behaviour and values, which was beautifully shown in the French Film "Les choristes" – "The Choristers" - based upon real facts. In general terms, all the arts offer a tremendous pedagogic potential to foster self-knowledge and self-expression, facilitating positive changes and enhancing human values.

Boys' Choirs are particularly important today as recuperative masculinity politics: from the present boys' crisis worldwide towards a recovery of boyhood in a horizon of human/ spiritual values. Scouting also offers a tremendous potential in terms of recuperative masculinity politics and a positive recovery of boyhood.

From this point of view, Boys' Choirs and Boy Scouts are deeply complementary and crucially needed today to tackle the persistent crisis of boys' education and boyhood in general and redress it towards a new boyhood imbued with human values within the harmony of the whole.

The Boys' and the Girls' Choir will be accompanied by the School Orchestra.

Long week-ends and holidays will allow our students to undertake special activities, like:

- Outdoor camps for trekking and hiking;
- And special social service to the needed, especially within the community.
- The Boys Scouts and Girl Guides will constitute a particularly suitable platform for both outdoor camps and social service.

Throughout the year, the School shall celebrate **special events and days, evening/ cultural functions, etc**, allowing the students to offer their performance, inviting parents/ families together with members of the community, and also welcoming scholars or artists from outside to bring their contribution.

Together with the International Colleges, our Schools will aspire to become **cultural centres and living hubs** hosting different kinds of activities and programmes, always from an intercultural perspective and pointing at the new holistic paradigm in emergence.

ABOUT UNIFORM:

(Every school may have its own colours to avoid standardization.)

No socks/ closed shoes (for India); we are in a tropical country.

The same would apply to other tropical countries. No ties/ jackets.

We do not want boys to look like business men in miniature, or girls like boys.

- Young boys (until 9th or 10th /15 or 16 years): shorts and T-shirt (British Oxbridge style polo/ golf T-shirt).
- Elder boys (from 10th or 11th / 16 years): long trousers and similar T-shirt.
- For girls: skirt and blouse, changing across the three sections (Primary, Middle and Higher Secondary).
- Each one of the 3 sections of Boys and Girls will have distinctive colours.
- There will be another sports uniform, scout/ guide uniform;
- And, in India/ Asian countries, evening Kurta pyjama or traditional/ Brahmin style dress for boys and evening dress for girls also following the Indian/ Asian traditions, which the day scholars may use for evening functions and special days or events. Our schools in Western countries will find the equivalent kind of clothing.
- **Male staff:**
White and white or Kurta pyjama/
traditional dress (in India).
Trousers/ shirt (in Western countries).
- **Female staff:**
Sari (in India).
Decent dress (in Western countries).

**Staff shall use academic gowns for the morning
Assembly and for special occasions.**

Pedagogic progress through the age-groups.

- It is fundamental in school life **to take into account the specific needs of each age group, and hence, the different phases of human growth: birth/ 2/ 5/ 8/ 11/ 15/ 18/ 21.**

The predominance of Realism in educational philosophy with its intrinsic overemphasis on academics (in rationalistic/ scientific terms) has too often brought teachers and schools to treat children in the same way irrespectively of the characteristics of the different age groups, which means that modern schooling has shown a ruling tendency to teach small children like elder students through purely scholarly methods. Rousseau already protested against this lack of sensitiveness towards the child at the dawn of the modern age. The pedagogic schools of Anthroposophy, Naturalism and Pragmatism took up his call for a child-centred pedagogy, and eminent educationists such as Steiner, Montessori, Piaget and Dewey fully developed an educational system respectful of the different age groups and the requirements of the child at each phase of growth.

- In this process of human development, **two steps are anthropologically decisive to awaken the capacity of reasoning and the autonomy of the subject: 7/ 8 and 10/ 11,** the first step arising when the primary teeth start to shed and the permanent teeth begin to come through, the second one being marked by the first changes of puberty. Not by chance, all human cultures before modernity –indigenous and Ancient- arranged different kinds of initiation, especially necessary for boys, between these two crucial moments.

- **Education prior to the change of teeth.** In front of the strictly scholarly approach of Realism in mainstream schooling, educationists such as Steiner or Montessori evolved more humanistic pedagogies which are also more coherent with the child's nature. Below the development of reasoning, that is, below 7/ 8, children can believe in Father Christmas or the Three Wise Men, which vanishes above this age. As Steiner suggested, the period below 7/ 8 is the realm of magic and myth, where playing becomes the most natural pedagogy together with sensory training and activities. A sensible educational system must take this obvious reality into account, instead of forcing young children into merely academic patterns.
- **After 7/8 and even more after 10/ 11 till 14,** the elder child (7/ 10) or young adolescent (11/ 14) develops the capacity of reasoning (first concrete then abstract), moral judgement and his or her autonomy as a subject, though imagination and playing still retain a significant role –in ways which are quite different from younger children, as scouting has very well understood-. Through this period, peers relations and the positive adult role model –especially within the same gender- become very important; that is why the mentor was so crucial for the educational process in all civilizations before modernity. This is also the time for heroes and adventure –even more for boys-, which youth literature and scouting have profusely elaborated. A sensible pedagogic system must be adapted to the evolving needs of these age groups instead of simply transporting into them higher academic patterns.
- **After 14/ 15,** the human being is totally equipped with reasoning skills and moral judgement; at the same time, he or she is deeply autonomous as a subject –though the human being aged 11/ 12 has already all the basic capacities of the adult-. After 14, purely intellectual training can reach its peak, provided that it has been adequately prepared through the previous stages. The common aberration of modern schooling has consisted of treating the previous stages with the same patterns of higher secondary school –only academics, always sitting on the desk with fixed timings and rigid lessons, with bells and tests disciplining the mind and drilling the soul-. That is why Waldorf Schools, Naturalism and Pragmatism protested against these pedagogic distortions that did not respect the nature of the child through the successive age groups. After Rousseau, eminent educationists such as Steiner, Montessori or Dewey opened the school scenario to new possibilities beyond the chalk and talk with all the eyes on the blackboard for hours and hours and purely bookish knowledge. Even in higher secondary school, education should continue to be holistic, and the other dimensions of the human being beyond the intellect should not be forgotten, something that the International Baccalaureate, academically reputed, tries to implement in different ways.

Value education must integrate Piaget and Steiner, which means that holistic value-based education must take into account through its daily implementation the features and the needs of each age group, and must, therefore, be adapted to the growing process of the human being – and, needless to say, to the unique characteristics of every child or youth-.

Education in human values through the age groups.

Pedagogic strategies more suitable for each group.

(Just as an open and flexible set of examples, never exhaustive).

For all: arts/ art-therapy/ self-expression.

Child/ primary school:

- Moral/ inspirational stories, fairy-tales, legends
- Playing activities and control of outer senses
- Simple projects; basic community life
- Collective prayers/ quotations (appropriate)
- Group singing –with values-
- Development of the spirit of inquiry, curiosity, imagination
- Silent sitting –short-.

Young adolescent/ middle school:

- Study of the lives of great men and women –intercultural-
- Direct value teaching -through understanding, while showing clear ideals-
- Group activities -so well developed in scouting, for instance- and projects
- Service activities –appropriate to the age, under teachers’ guidance-
- Solidarity and community life –scouting, outdoor activities-
- Collective prayers/ quotations –more profound, always intercultural-
- Group singing –with values, learning classical languages like Sanskrit in India-
- Introspection, self-inquiry and dialogue with others –with appropriate guidance-
- Meditation in the Light and yoga –or other disciplines like katsugen undo, etc-.

Teenager/ higher secondary school:

- Study of the cultural heritage –value-centred, in an intercultural perspective-
- Study of the traditions of wisdom -in an inter-cultural perspective, stressing the common values through cultural diversity-
- Direct value teaching -sharpening intelligence with more philosophical insights
- Philosophical topics and issues –directed towards self-inquiry through dialogue-
- Service activities -more maturity and responsibility-; more developed projects
- Community life with longer outdoor activities –hiking, trekking, etc-
- Collective prayers/ quotations –intercultural-; group singing -value centred-
- Individual self-inquiry (with appropriate guidance) and groups of dialogue
- Meditation in the Light and yoga –or other disciplines like katsugen undo, etc-.

By bringing together the findings of Developmental Psychology (Piaget), Jungian/ Transpersonal Psychology (Jung, Wilber, Maslow), Integral Education (Rousseau, Steiner, Montessori, Dewey, Vivekananda, Tagore, Aurobindo, Krishnamurti, Sathya Sai Baba) and Comparative Philosophy/ Anthropology:

A tentative map of the pedagogic progress through different age groups.

(Any developmental scheme must be flexible and adapted to every child's genius.)

➤ **Early Childhood: from 3 to 7;**

corresponding to Kindergarten and the beginning of Primary School.

- This is the realm of magic before the age of reason. For this, educators can make an abundant use of story-telling, fairy tales and legends as tools of value education – together with a wise use of poems and songs-.
- Playing constitutes the natural way of learning; play-way methods may prevail.
- The educational system must allow the child to learn and discover by himself or herself; teachers must arrange spaces and tools for experiential self-learning. Instead of blocking the child's potential, education must awaken and unfold it.
- For young children sensory training is equally fundamental.
- The pedagogic process must be artistic in general terms; specific arts and crafts training should also be introduced in simple and natural ways.
- The child's body during this period cannot be imprisoned in a rigid classroom; the educational system must allow young children to move and physically express themselves, for which children of this age group must perform movement games and practical outdoor activities outside the classroom.
- Though fundamental throughout the whole educational process, emotional education must especially be taken into account with young children.
- At this tender age, it is very important to cultivate the relationship with Nature and the sense of organic unity and harmony.
- For this, we should celebrate with young children the main seasonal festivals from different cultures –opening in a natural way the child's mind to intercultural dialogue and the unity of mankind-. Needless to say, elder students should also participate.
- Because this is the age of magic, the spiritual dimension can be nurtured very easily through the adequate tools –which means that meditation must be of a very simple kind-.
- This is the only stage where coeducation does not offer major problems; afterwards, there is sound anthropological evidence to prefer different spaces for boys and girls, although some spaces of interaction may also be arranged –together with the interaction between elder and younger children-. This is due to the undeniable differences in learning and the general anthropological differences between the two genders -which postmodern culture has dogmatically denied through the imposition of artificial and ultimately political arguments-.

➤ **Later Childhood: from 8 to 10;
corresponding to the end of Primary School.**

- In biological terms, this is the period of the change of teeth.
- This is essentially a period of transition between childhood strictu sensu and the first period of adolescence –puberty-.
- This fact was clearly understood by archaic and ancient cultures through the first steps of the initiation process –much more crucial for boys than for girls-, manifesting the end of childhood and the birth of a new “adult” status.
- While being less egocentric than the small child, the elder child deeply needs social relations, friendship, community life and also the positive role model of the adult outside the household –especially within the same gender-.
- That is why modern scouting has offered the children of this age group a first possibility of outdoor expansion, subject autonomy and social life through cub scouts.
- Modern schooling has incorporated this age group into most of Primary School; both the academic contents and the pedagogic methods must change in relation to the previous stage, preparing the growing mind for a first development of the reasoning and thinking capacities –in concrete ways-.
- However, this cannot consist of a mere imitation of the higher secondary school academic patterns; schooling must be adapted to the anthropological characteristics of the age groups, which mainstream schools often failed to do with the abuse of chalk and talk/ lecture methods and memorization of information.
- The transitional nature of this age group can be exemplified by the disappointment at discovering that Father Christmas or the Three Wise Men do not exist; it was dad/ mum. The world of magic vanishes, but the child still needs a legendary horizon, which scouting and youth literature have clearly grasped.

➤ **Early Adolescence: from 11 to 14;
corresponding to most of Middle School.**

- In biological terms, this is the period of puberty.
- It constitutes a crucial stage of mankind, more delicate for boys than for girls, for which the initiation process was considered as fundamental –especially for boys- by all cultures of humanity before the advent of modernity and its tabula rasa.
- That is why this is the golden age of scouting in the modern world. Lord Baden-Powell, who was a Free Mason, created scouting as a modern form of initiation in a world that had dramatically lost both the initiation culture and the metaphysical dimension of the Cosmos.
- At this stage, playing is also natural and important, though in different forms compared to earlier childhood; scouting, again, has provided a sensible understanding of the more mature playing nature of the young adolescent.
- In general terms, this period must allow the young adolescent to live his or her subject autonomy –one of the major reasons for the very existence of scouting in the modern age- instead of overprotection and infantile treatment.
- Furthermore, this is the age of reason, and the academic dimension of education must nurture the developing thinking capacities of this age group –in terms of logical/ abstract thinking-. A human being aged 11/ 12 has already all the basic capacities of the adult and can be autonomous.

- Beyond intellectual thinking, the educational process must encourage the individual's creativity and imagination in its own genius and inclinations.
- In parallel to the dawn of reason and creativity, the young adolescent starts evolving moral judgement, which value-based education must cultivate in a double direction:
 - to develop the moral autonomy of the subject,
 - and to help the growing human being to know itself and build its own value system and personal vision.
- Kantian moral autonomy/ subjectivity and Socratic self-inquiry towards self-knowledge/ self-realization should be intimately intertwined in the horizon of a humanistic philosophy of education.
This double path must obviously be further developed in the last stage of later adolescence.
- For all these reasons, Social Studies (with History and Geography) must play a prominent role for this age group, not only to provide basic general knowledge but also to stimulate the awakening of reason –in a complementary way to mathematical/ scientific thinking-. Here, the value dimension of Social Studies must be fully developed by an integral form of pedagogy.
- This period can also lay down the foundations of science by fully utilizing experimental and experiential methods –direct experience-, observation and activities that are highly appreciated by young adolescents.
- At the same time, artistic education can flourish in this period of human growth; even if the arts must be present throughout the whole educational process, they are especially important for this age group to foster creativity, self-knowledge and self-expression in more mature ways than young children –young adolescents can sometimes emulate adults' standards in music or the arts-. There have always been true geniuses of this age group.
- Moreover, this age group allows more mature paths of meditation and inner work compared to the more simple tools utilized with younger children.
- Although the previous period could not believe in a certain kind of magic anymore, the end of childhood and the beginning of adolescence –and boys even more- need a legendary horizon filled with heroes and adventure, something that both youth literature and scouting have comprehended and provided -like all traditional cultures with their myths and legends-.
- This period of life –and already the previous one and still the next- needs healthy bonds of affection, friendship and community life –especially with peers within the same gender- nurturing emotional intelligence and relational/ social skills; this is the golden realm of friendship and peers relations.
- For similar reasons, this age group requires the positive role model of the adult –in particular within the same gender-; hence, the fundamental role of the mentor in most cultures before modernity and its pedagogic potential and success in the modern world among Scouts for instance. All cultures before modernity realized that all this was especially crucial for boys, but our world has eroded it, which lies at the very roots of the contemporary crisis of boys education which is unique in history.

➤ **Later Adolescence: from 15 to 18;
corresponding to Higher Secondary School.**

- From a biological point of view, the youth undergoes through this period the final steps of physical maturation –that may go on till 21-.
- During these years the subject autonomy will be consolidated, for which scouting activities may be of a more adult kind.
- For the same reason, social activities and service can also adopt more mature forms – although it can be started before in ways adequate to the age group-.
- Already prepared through the previous stage, moral judgement may also be refined and strengthened now –together with ethical ideals and social responsibility-.
- Since the conceptual/ abstract thinking capacities are fully developed, academic training must enhance the use of Social Studies and fully introduce Philosophy as a profound path of value education and self-inquiry.
- The educational process must encourage freedom of thought and creative/ critical thinking; however, a value-based horizon and the awakening of human values must counterbalance the danger of negative/ destructive criticism, bringing the growing youth to evolve more positive forms of constructive criticism and creative thinking.
- Mathematics and Science can also progress from the more simple contents of previous years. This is the perfect age to introduce deeper and more conscious interdisciplinary approaches, linking, for instance, quantum physics and philosophy, science and ethics, etc.
- In terms of evaluation, essays/ dissertations must be preferred in order to nurture the finest thinking capacities and self-expression.
- Despite the full development of conceptual/ abstract thinking and a wider range of cognitive/ intellectual skills through conceptual education, higher secondary school must be able to continue to provide a holistic curriculum where the arts and the spiritual dimension still blossom to awaken the deeper multidimensional nature of the growing human being.
- The spiritual path can also become more sophisticated at this stage, involving longer meditation and more conscious self-inquiry and reflection upon human condition – though all these fundamental aspects of the spiritual path must be introduced in more simple ways into the previous age groups-.

How do we do it?

The educational practice.

The importance of practice. From philosophy to pedagogy.

Any philosophy of education must be accompanied by an efficient pedagogy that works and brings a concrete answer to the crucial question: How do we do it?

Sai International Schools will offer an integral or holistic philosophy of education, combining the best academic education from Europe/ the West (directed towards free thinking and creativity) and the most profound spiritual education from India/ the East (directed towards free self-inquiry, the blossoming of the inner being with its intrinsic human values, and the transformation of the human being towards higher states of humanity).

This kind of pedagogy will be implemented through a unique pattern, where the school week from Monday to Friday will be divided into two sections:

- the mornings will be devoted to the compulsory academic subjects (from the International Baccalaureate of Geneva), complying with the required standards and fulfilling the prescribed syllabus, always with true academic excellence, consisting of learning how to learn, how to think and express oneself, in creativity and genuine freedom, which is already the underlying spirit of Geneva;
- while the afternoons (and Saturdays on an optional basis) will offer a whole system of complementary workshops that will allow the students to unfold all the dimensions of the integral nature of Man in harmony and depth.

Moreover, the school will incorporate **three facets of the most profound pedagogic value, which will develop the communitarian and relational dimension of the human being, emotional intelligence, and positive values** (like the sense of responsibility, tolerance and solidarity, a spirit of community life, harmony, brotherhood and unity, etc):

- the pedagogic care of younger children by elder students while mixing age groups (through different ways);
- the practice of different forms of altruistic service to the fellow beings -appropriate for every group of age-;
- the organization of different kinds of outdoor activities and community life through special week-ends and longer holidays, together with the creation of a unit of Boy Scouts and Girl Guides under the umbrella of the World Scouts and Guides Organization; needless to say, the communitarian and relational dimension will be also cultivated in the hostel life for the residential students, even though we will organize special activities with the same philosophy for the day scholars.
- Finally, Sai International Schools will try to create and keep alive in the whole campus life a specific culture and atmosphere which naturally bring out the deepest values.

- In that sense, the schools will try to combine **the two inseparable dimensions of education:**

LOVE and DISCIPLINE (primarily self-discipline).

Love without discipline leads into chaos;
discipline without love leads into authoritarianism.

- Sai International Schools will also follow **the beautiful and profound influence of the Gurukula, the community of the master with his pupils**, maybe the greatest pedagogic tradition of mankind, that has produced the highest culture in India from Vedas and Upanishads to Vedanta, and also in Ancient Greece from the schools of Orphism and Pythagoreanism to the Academy of Plato, the Lyceum of Aristotle and Neo-Platonism.
This is the best form of education, especially for boys.

This kind of master/ pupil relationship existed in most of the indigenous and Ancient cultures of mankind. It was still the basis for the cultural grandeur of European Renaissance –the workshop of Leonardo da Vinci for instance-; it has also been the prevailing pedagogy to train the greatest composers and musicians. Even the professional training in many crafts and guilds has been given in all cultures through this kind of master/ pupil relationship.

However, the school-factory of the Industrial Revolution developed an academic system radically dehumanized that is not working anymore and has no more future ahead.

Our Project can be easily adapted to a Gurukula.

The unique combination of genuine love for the pupil together with the necessary self-discipline in the spirit of the Gurukula will allow us to lay down the foundations of **an educational system based on the fundamental human values towards the real transformation of the human being here and now**, with the capacity to act in the modern world through a proper academic training while making a difference through an ethical/ spiritual vision and a cosmopolitan spirit.

Unfolding human values from within will also prompt in each individual the transmutation of negative attitudes and tendencies into positive patterns -without coercion, which never works on the long term-. Instead of negatively reprimanding, we must lovingly help the child to realize and positively transform.

In conclusion,

it is not our aim to recreate new systems of beliefs or to put into practice new forms of catechism, but to implement genuine and real ways of transformation of the human being through education.

For that, we can make use of several instruments, the practical value of which has been clearly demonstrated, such as:

- the use of classical music (both European/ Western and Indian/ Eastern) stimulating higher states of consciousness and vibration;
- the use of the fine arts and humanities, not only to foster emotional intelligence, creativity and the aesthetic taste, but also those higher states of humanity;
- the contact with Nature, the Earth and animals, bringing out positive changes in character, which has often worked even among difficult youths;
- the practice of relaxation, different kinds of visualization and meditation (for instance, meditation in the light), yoga, katsugen undo, etc, channelling real and profound changes from the inner spiritual being.

At the same time, the key lies in **consciousness**, and we are in this world here and now, which means that the process of inner transformation can only occur in **relation** and **dialogue**, something beautifully expounded by Prof. R. Panikkar and J. Krishnanurti.

Then, the attitude, intention and character become fundamental in the educational process, transforming negative patterns into positive.

That is why we must closely connect value education in depth and academic training with excellence:

- by reducing the amount of information which is not digested and becomes excessive;
- by directing the academic study towards understanding, the capacity of free thinking, self-expression, creativity and management with wisdom;
- by promoting interdisciplinary perspectives and team work (without dismissing the personal effort);
- by using academic knowledge as the understanding of the human process that occurs within each one of us, and also as a fascinating exploration into Reality;
- by using high/ classical culture (both Western and Eastern) as an instrument of value education;
- and ultimately, by nurturing the emergence of human values and purer states of consciousness from the spiritual depth within, through contemplation without judgement, in unity and solidarity.

We can take the example of history.

There are three kinds of history:

- First, the traditional and boring approach consisting of long lists of kings, battles, etc.
- Second, the more intelligent history put forward by the critical thought of the West, especially in Europe, trying to find the profound causes for historical processes and trying to bring a more sociological understanding of the past.
- Finally, history as value education, taking the basic facts from the first approach, evolving the intelligent reasoning of the second one, and then, observing without judgement the historical process as a human process which happens within each one of us. Then, we perceive history as our own history, as the human condition and the human process, from which we can learn fundamental teachings for ourselves, for our own process of transformation, knowing that the key lies in consciousness, and that consciousness affects the vibration of everything.

To summarize, we want to put together in our institutes different disciplines or dimensions that have been separated until now:

- * science and spirituality, and in particular, the traditions of mystical/ spiritual philosophy and quantum physics/ new science;
- * the paths of inner work and moral education –instead of the prevailing moralistic catechism that constitutes a system of beliefs to be imposed at the mental/ emotional levels-;
- * higher/ classical culture and value education in an intercultural approach Western/ Eastern – instead of the mediocre culture often reinvented by superficial amateurish value-based strategies-;
- * academic excellence and integral education –whereas some holistic pedagogies have clearly produced an erosion of academic standards together with an immature abuse of progressive ideas-.

By doing so, we intend to go more deeply into integral education in human values, both at the level of the **theory** and the **practice**, presenting a true philosophy and an academic foundation for value education together with a profound and efficient pedagogy that works.

In this horizon, our work will constitute a humble contribution joining with the efforts of many others in a collective movement which will put forward a new paradigm, a new concept of humanity and a new civilization, for the welfare and the transformation of all beings, in a world devoted to peace, fulfilment and unity.

PHILOSOPHY/ PEDAGOGY FOR INTEGRAL EDUCATION IN HUMAN VALUES.

GENERAL PRINCIPLES/ EDUCATIONAL PHILOSOPHY OF A FIVE-FOLD PEDAGOGY.

1. Academic excellence towards the finest conceptual education: understanding, critical/ creative/ free thinking and self-expression.
2. The aesthetic dimension: the sense of beauty, sensitiveness, creativity and emotional intelligence through the humanities and the arts.
3. Human values, the Self, and the spiritual dimension: from outer religions towards inner spirituality; self-inquiry towards self-knowledge and self-realization.
4. Physical development, education for health and the relationship with the environment.
5. The relational and communitarian dimension: love and compassion, ethics and positive values; relation and dialogue towards a new paradigm.

PRACTICAL IMPLEMENTATION OF THE FIVE-FOLD PEDAGOGY.

1. The physical domain and the environment.
2. The relational domain and community life.
3. The intellectual domain/ academics.
4. The aesthetic domain/ arts and humanities.
5. The spiritual domain; self-inquiry, transformation and self-realization.

A five-fold pedagogy for integral education in human values:
Unfolding the five fundamental dimensions of the human being.

A PLAN FOR PRACTICAL IMPLEMENTATION.

I. The physical domain and the environment.

- * Physical exercise through cooperation rather than competition, and harmonious growth.
- * Education for holistic health and sustainable living.
- * The relationship with the environment and the contact with Nature.

II. The relational domain and community life.

- * Community life through hostel, campus routine and outdoor activities.
- * Boy Scouts and Girl Guides; altruistic service in the community.
- * School Parliament; spheres of participation and responsibility for children.
- * The pedagogic role of elder children towards younger –while mixing age groups-.
- * Teachers' tuitions and tutorials; individualized attention and personal guardian.
- * Emotional education, love and compassion; positive values, ethics and character.
- * Groups of dialogue and education for dialogue (intra and inter-personal).

III. The intellectual domain/ academics.

- * Reduction of unnecessary information towards quality; not quantity.
- * Conceptual education: understanding, free thinking, self-expression and creativity; basic facts and concepts; analytical, critical and creative thinking; imagination.
- * The multiplicity of geniuses, and the uniqueness of every child or human being.
- * Academic education as education in human values (no separation or dualism).
- * Knowledge with ethics, values and a sense of service (social dimension).
- * The comparative perspective: intercultural dialogue in a cosmopolitan spirit.
- * The interdisciplinary perspective and the unity of knowledge; holistic paradigm.

IV. The aesthetic domain/ arts and humanities.

- * History of art in a comparative/ value perspective; art as a source of inspiration.
- * Practice of different disciplines: humanities, fine/ visual arts, music, dance, drama.
- * Fostering the sense of beauty, creativity, sensitiveness, imagination and self-expression.
- * Aesthetic taste and emotional education; the pedagogic/ therapeutic potential of art.
- * Art as value education: an agent for self-knowledge and transformation.

V. The spiritual domain; self-inquiry, transformation and self-realization.

- * The spiritual traditions in a comparative perspective, stressing common values.
- * Direct teaching of human values through topics; teachings of spiritual masters/ sages.
- * Practice of relaxation, meditation, yoga, etc; paths and instruments for inner work.
- * Energy and consciousness; self-knowledge, transformation and self-realization.
- * Self-inquiry, dialogue and relation; from I to You, and from You to We.

In order to implement an efficient holistic pedagogy, we should be aware of several fundamental points:

A. We should not fall into a new kind of dualism.

Which means that there should not be a session of yoga or meditation cut from the academic classes. There must be a total integration of values and spirituality with academics, so that academics already incorporate the value/ holistic perspective, while value teaching and spiritual practice are rooted in this world, to serve here and now.

B. We should not fall into a new kind of mechanical catechism, a system of beliefs at the mental/ emotional level, closed within itself, which we impose upon others.

C. We should always keep in mind the ultimate goal of education: to accompany the growing human being in his or her process of self-knowledge and spiritual transformation –a real, ontological transformation towards higher states of consciousness and vibration, manifesting the inherent divinity of humanity-.

D. We should be open to relation and dialogue: with the children themselves, teachers, institutes and organizations, and other schools of thought and cultures.

E. We should never forget that the educator must also be trained, like the student, since the whole life constitutes a continuous process of education and transformation.

F. We should provide both internal and external spaces of training for teachers, other professionals, parents, etc, especially from the holistic/ value dimension.

If the teacher or adult in general does not live himself the values, he will not be able to be the living example that can really inspire the children or other adults.

G. The schools should work in connection with families, acknowledging that parents are the first educators.

H. All educators should take into account the cultural and social context where the child is growing and where the school is located. Education must be systemic.

When the context is not favourable, we should try to create new positive perspectives for the children, instead of negatively fighting against a hostile environment or tendency.

I. The axiological and spiritual dimension of education should be adapted to the continental/ national/ regional/ local culture of the place.

Only from the roots in our own culture and tradition, can we open ourselves to other cultures and traditions, and strive for the brotherhood and unity of mankind.

J. Education should be based upon the double principle of love and (self) discipline, knowing the tremendous potential for transformation of love, but being also conscious of the need for (self) discipline in the growing process –always within a humanistic frame of mind, inseparable from love and human values-.

Many schools, especially under the umbrella of Sri Sathya Sai Organization, offer **a value-based education founded on a five-fold methodology consisting of 5 basic techniques (without truly incorporating the developmental dimension):**

- direct teaching (of human values);
- reading, story-telling and use of quotations (of an inspirational kind);
- group activities and group singing;
- prayer;
- silent sitting/ meditation (in the Light).

The holistic/ value-based pedagogy of Sai International Schools also incorporates all these methods.

- The direct teaching will be an essential part of the afternoon workshop devoted to human values, even though the whole pedagogy of the school will be value-centred, which means that values will also be incorporated in the academic subjects and in the whole campus life.
- Reading, story-telling and use of quotations: this technique will be used in the afternoon workshop of human values, together with humanities classes; in both of them, we will present to the students the treasures of wisdom and mysticism of the main spiritual traditions of mankind.
- Group activities and group singing: this will be another main feature of the afternoon workshops dedicated to fine arts, music, dance and drama, through which we will bring the students to prepare performances that will be played in public.
- The issue of prayer will have to be handled carefully in our international school, precisely because it will be totally multicultural and multi-religious in nature, with students and teachers from different religious backgrounds. However, we will do a certain use of prayers, especially of a “mantra” or musical kind, both in the morning assembly and in other activities. But then, we will use prayers borrowed from all the main religious traditions to emphasize the unity and brotherhood of mankind.
- Needless to say, silent sitting and meditation will be an integral part of our afternoon workshop centred on the inner path or “sadhana”.

- The mind shaped by modern materialism, unaware of scientific developments such as sophrology, the mind's new science, transpersonal psychology, etc, in parallel to the scientific study of meditation or the modern development of techniques of inner work from the traditions of wisdom, may ask: **How can we implement in depth this integral nature of education in the present school system?**

The answer is multifaceted, since there are many pedagogic possibilities once we understand and acknowledge the integral nature of education.

- For instance, a respected scientific discipline like **sophrology** has designed a manifold spectrum of tools to operate this fundamental inner work without which human beings never really change. The results have been astonishing, and they have been unequivocally recognized by the scientific arena and public authorities. Some techniques can be adequately adapted to the educational field for different age groups.
- In many countries there have already been experiments to introduce **relaxation and meditation** in the classrooms; the results have been in general so positive that the demand for it has increased. For example, Susanna Martínez and Luis López have done field research on this topic for the Ministry of Education of the Government of Catalonia, and the success in several schools—even Catholic schools—has been undeniable. There are innumerable experiments like this one all around the world, proposing different kinds of relaxation and meditation for children and teenagers.
- Needless to say, India can offer to the world the longest and deepest experience to introduce the inner dimension into the educational process. In countless schools of the Indian subcontinent, **yoga and meditation** are practised in different ways, from which many educators from other countries can certainly learn a lot.
- More than 150 **Sri Sathya Sai Schools** in India and in other continents have successfully implemented value education that has been officially appreciated by academic institutions and governmental authorities. Other educators can investigate about their pedagogic practice to see how it is possible to translate it into their own schools.
- The philosophical teachings of sages like **J. Krishnamurti** can inspire educators to design groups of dialogue linking an earnest introspection with genuine relation and dialogue. There have been many studies and experiments about dialogue in the last decades—the famous physicist **D. Bohm** for instance, who had a deep interaction with J. Krishnamurti—.
- Both artists and educators have also put into practice **the therapeutic role of art**—fine arts, music, drama, dance, etc—; the results through art-therapy have often been astounding, especially with difficult youths.

In conclusion, the spectrum of possibilities is infinite, and a lot of work can still be done to design concrete ways to implement the integral nature of education within the school system.

THE DIFFERENT STAGES OF INTEGRAL EDUCATION: THE EDUCATION OF CONSCIOUSNESS AND HUMAN REALIZATION.

If science has put forward the crucial role of consciousness after removing all the veils of modern materialism, could education ignore in the daily life of schools the most fundamental development of scientific research in coherence with the deepest philosophy and wisdom of mankind? Well-known reports such as Delors' open the door towards the education of consciousness as the cornerstone of the pedagogic practice for the future of mankind.

- First, education must fully acknowledge **the power of the mind** and direct it in positive terms towards enhancing our health and becoming better human beings, which implies, first of all, the knowledge of oneself.
- Hence, the education of consciousness must work out **the Socratic process of self-inquiry towards self-knowledge**. An earnest observation of ourselves, with our values but also our blocks and prejudice, is the only path towards genuine self-knowledge. Certainly, many mental or emotional blocks will vanish through this process of self-inquiry with the therapeutic effects that will follow.
- However, we must be aware that **introspection is inseparable from relation and dialogue**. Socrates' motto -"Know yourself"- does not deny Krishnamurti's emphasis on the central role of relation and dialogue in human life, something that Prof. Raimon Panikkar developed in philosophical terms. In fact, Socrates himself always taught through dialogue, as it also happened between master and pupil in the Upanishads. The education of consciousness is also an education for dialogue.
- At the same time, as the philosophical tradition of Kashmir Shaivism clearly understood in Ancient India, and sophrology has reasserted in the postmodern world, **consciousness is inseparable from energy**. Therefore, integral education must also accompany the growing human being into a deeper introspection through paths of meditation or yoga in order to put energy into motion and foster real changes inside. quantum physics has outlined the dynamic picture of a living cosmos in interdependence; it has realized that matter is but a form of energy, and the Being is in fact Becoming. Integral education must work at the level of consciousness and also at the level of energy. The new developments of science in the last decades have enlarged the fascinating spectrum of meditative paths and techniques of inner work wisely elaborated by millenary traditions of mankind.
- Finally, as the respected spiritual master of India, Sathya Sai Baba, always reminded, **this kind of education should be value-oriented**, since the fundamental human values, like love and compassion, naturally unfold from that depth of the human being which we may dare to call spiritual.

Then, **the academic realm** reaches its highest dignity, simply on the grounds that we must live here and now in human society with our fellow beings. But academic learning cannot be anymore a mechanic pouring down of information upon children's minds. True academic excellence will be directed towards creativity and free thinking as one of the fundamental facets of human realization.

- Unlike some proposals of holistic education that have fixed everything in detail once forever,
 - This Project provides a general frame and a theoretical foundation that may work as a source of inspiration and a set of guidelines.
- In concrete terms, we wish to leave the pedagogic process open to research and innovation, flexible enough to evolve with the very rhythm of Life.
- Instead of establishing a rigid formula for the arts, value education and inner work, we propose a sample of traditions and techniques –among others- allowing every school and teacher to explore in free and creative ways.

Schools and teachers can draw valuable ideas from a diversity of sources, such as: (This is an open list, never to be closed or fixed.)

- Christian meditation –Desert Fathers, Guigo II, St Teresa, St Ignatius, etc-
- Yoga, Meditation in the Light –Tejo Dhyana-, and other paths of meditation and inner work from India –Vedanta, Shaivism, Tantras, Vaishnavism, etc-
- Meditative techniques and tools of inner work from the major Buddhist traditions: Theravada, Mahayana, Chinese Mahayana, Tibetan and Zen
- Meditative techniques and tools of inner work from other spiritual traditions of mankind –China, Japan, Cabbala, Sufism, indigenous traditions, etc -among which, for instance, Tai Chi, Chi Kung or Qigong-. Etc.
- Transcendental Meditation (T.M.; by Maharishi Mahesh Yogi)
- Seitai (Katsugen Undo, Yuki; by Takahashi, Noguchi)
- Reiki (by Mikao Usui; or similar forms of energetic practice)
- Relaxation and visualization (with many schools and techniques in the last years)
- Sophrology (A. Caycedo, N. Caycedo, R. Abrezol, G. Pantaleoni, etc)
- Modern Mindfulness (J. Kabat-Zinn).
- Focusing/ Thinking at the Edge (E. Gendlin)
- Past Reality Integration; the Art of Conscious Living (PRI; by I. Bosch)
- Emotional Intelligence (Salovey, Mayer, Goleman, etc)
- Spiritual Intelligence (Zohar, Marshall, Torralba, etc)
- Multiple Intelligence and Project Spectrum (H. Gardner)
- Groups of dialogue and a culture for dialogue (D. Bohm, etc).
- Self-inquiry, observation and transformation in relation and dialogue (from Socrates, Vedanta or Buddhist teachings to J. Krishnamurti). Etc.
- Sri Sathya Sai Education in Human Values
- Ramakrishna Mission Schools and modern Vedanta
- Shantiniketan, Shriniketan and Vishva Bharati (R. Tagore)
- Schools of integral education following Sri Aurobindo and the Mother
- ISKCON Schools/ Krishnamurti Schools
- Waldorf Schools (R. Steiner)/ Montessori Schools
- Schools inspired by Prof. Dewey/ Prof. Kilpatrick
- Transpersonal Education (Jung, Wilber, Maslow, Rothberg). Etc.

SOME PRACTICAL EXAMPLES OF VALUE-BASED EDUCATION.

Evolving fundamental human values such as:
Truth, love, peace, righteousness, non-violence, etc.

(Through the adequate adaptation from lower to higher age groups).
(And through the wise adaptation to every social/ cultural context).

➤ **Visualization/ meditation (related to a specific human value).**

Children from all classes can enter the inner realm through different paths of inner work: breathing, relaxation, visualization, meditation, yoga, etc.
These different forms of inner practice can be drawn not only from the major spiritual traditions of mankind, but also from modern schools of inner work or humanistic therapies, such as Mindfulness, Focusing, Sophrology, etc.

We examine this issue below with more detail, but we want to insist here that some tools of inner work can easily be connected with the teaching of fundamental human values.

For instance, after a simple relaxation children can be asked about what they have experienced, which may naturally arise a conversation about the value of peace –which is not outside but inside; only then it will be materialized outside-.
Needless to say, visualization –so well developed by Mahayana, Tibetan and Chinese Buddhism- can easily bring into the picture any specific human value.

Different forms of relaxation, visualization and meditation can be combined with a wise use of soft beautiful music.

Even corporal expression can be twinned with tools of inner work. Some spiritual traditions like Buddhism have worked out forms of walking meditation, whereas the Chinese/ Japanese traditions have refined ways of inner work through movement –like Tai Chi, Chi Kung or Katsugen Undo-.

➤ **Collective elaboration of a mural expressing human values.**

With the guidance of the teacher, the group will decide how to make the mural, and every child will bring its own contribution to the collective endeavour.
During the process of elaboration, soft beautiful music can be played.

After the mural is finished, it can be presented to the school, families or community.
Additional activities can be later envisaged: writing and public reading of a composition about the topic of the mural, further research about the topic, group dialogue/ debate, etc.

➤ **The Fine Arts and Values. Crafts.**

Always from an intercultural perspective.

- First of all, students can be invited to discover the fundamental human values imbibing the great works of art in the different artistic traditions of mankind.
The paintings of Leonardo da Vinci, for instance, constitute a whole treatise on the deepest values and the finest metaphysics.
- But the contemplation of beauty and value-based art from the greatest artists and the main artistic traditions should never neglect the direct creativity and expression of the children, who must be adequately trained and guided to express themselves and also convey the fundamental values through the different forms of artistic expression.
- The contemporary practice of art-therapy can suggest many fruitful activities to help children know and express themselves.
- Crafts can also help children to express themselves in connection to values.

The artistic approach to values can be obviously combined with other disciplines and activities.

As usual, children can be invited to share and show their creativity in public, not only to the school but even to the community.

➤ **Cinema and photography. Media.**

There are a number of good films, documentaries and photographic works that may illustrate a topic of human values.

To take a classical example: Dickens' Christmas story –and hence all the beautiful films adapting it- is imbibed with human values.

If we want to speak about non-violence, we can watch “Gandhi” by Attenborough.

“The Lord of the Rings” -both the original book by Tolkien and the successful films by Jackson- offer stirring human values like friendship/ love and a mythical picture of the victory of Light above darkness.

The list of suitable films could be as long as we wish.

Watching these materials can be linked to groups of dialogue/ debate or to individual/ group forms of expression –commentaries, essays, etc-.

Children can even be invited to make their own photography, documentaries or films in formats adequate to their age –much easier today than decades ago-.

Value education must always combine the inspiration brought by the cultural environment and the direct creativity and expression of the children.

Children can also do interviews to some personalities of the community or collaborate with some local media –with the assistance of the school and staff-.

➤ **Role-playing games.**

Educators can find many sorts of games, more simple or more sophisticated, always adequate to the age groups, that can arise a more direct experience of human values.

Some role-playing games can be designed from the rich tradition of scouting, but other kinds of games may be inspired by different well-established therapies or pedagogic systems. Some simple games can be drawn from daily life.

In any case, the role-playing game must always incorporate a clear pedagogic potential and must be value-based.

➤ **Drama/ puppetry.**

Drama is a major tool to work out human values with children from all age groups. Puppetry or puppet shows can also be highly educational for younger children.

Educators can combine **two major pedagogic possibilities:**

- to perform with the students major works from the world literature –from all cultural traditions-, selecting literary works that convey human values or a sound reflection on human condition;
- to create a totally new story and dialogues out of the imagination of the children with the wise guidance of their teachers.

Drama can always be combined with other artistic disciplines, especially corporal expression/ dance and music.

➤ **Corporal expression/ dance.**

Through corporal expression, children can express gestures and movements manifesting the different human values –and also their negative counterpart that must be transformed into positive attitudes and values-.

Mime can also be a wonderful path for children to express themselves in the process of transmutation from negative to positive, from the lowest instincts to the loftiest human values.

As suggested by Plato and restated by Steiner, dance teachers can invite children to feel and express a deeper rhythm and harmony from within.

The intercultural perspective can also be introduced here, making children practise different forms of dance and corporal expression from a variety of cultural traditions.

➤ **Musical expression/ performance.**

Classical music conveys the highest human expression of beauty and harmony. From the Cantatas and Passions of J.S. Bach or the Concerts and Symphonies of W.A. Mozart to stirring ragas from India, the musical heritage of mankind offers to educators an inexhaustible treasure to fill the children's minds and souls with beauty and harmony, knowing that beauty is one of the most profound paths of transformation and elevation of human consciousness –brutally overlooked by the last decades of vulgar culture in the post-modern world-.

Needless to say, teachers can wisely combine music education with teaching of human values, relating specific values to concrete pieces of music.

This connection between music and values can be further enriched through the contact with other disciplines and activities, such as corporal expression/ dance, literary expression, fine arts creativity, etc.

Together with the practice of listening to beautiful inspiring music, value education must invite children to play instruments by themselves and create their own music. There is nothing more educational than the direct practice.

➤ **Collective singing: from hymns and songs to a school choir.**

Slightly different from the previous section, collective singing can use both spiritual hymns from different traditions, mantras or strophes, classical songs –from European classical music or from other cultural traditions-, and even modern pop songs –provided that they are melodic and contain positive values-.

The most elaborated form of collective singing would be the formation of a proper school choir.

➤ **Group of dialogue/ debate (about a topic related to human values).**

With related activities before and after the proper debate or dialogue.

- Before, there can be individual or group research about the topic, individual compositions, etc.
Elder students can do some research outside the school also, not only in major libraries or information centres, but also in private or public organisms, meeting experts on the topic, etc.
- After, there can be a public presentation of the results of the debate to the same class, the rest of the school, and especially for higher classes, to external social actors.

➤ **Positive thinking and human values.**

In ways suitable for each age group, teachers can encourage children to find out statements of positive thinking related to any specific value in contrast to negative thoughts or attitudes conveying opposite experiences.

This open investigation can be combined with other activities to further develop and share the results of the group research.

➤ **Attitude tests.**

- Real-life attitude tests.
- Role-play attitude tests, which describe a moral problem without providing the issue or solution.
- Multiple-choice attitude test, offering a range of moral dilemmas with multiple-choice answers.

➤ **Story-telling and quotations.**

All the cultural traditions of mankind are full of inspirational stories that can evolve a conscious reflection on human values. Moreover, listening to a story that contains a deep message is something as old as mankind –dramatically lost for the last generations-. Value-based schools can recover all the pedagogic potential of this perennial practice of mankind in terms of value education.

Here, the perspective should again be intercultural, knowing that the gold mine is endless: from passages of the Iliad and the Odyssey or Celtic Ballads to Oscar Wilde's marvellous tales, the symbolical tales of the Sufi traditions, from the passages of the Mahabharata and the Ramayana to the Puranas of India, the parables from the Buddhist Sutras and Jatakas, the poetical stories from Chinese Taoism or Japanese Zen, profound narrations from the African peoples or the Native Americans, etc.

Reading meaningful quotations would be a similar practice that also offers an inexhaustible heritage from all spiritual, philosophical and literary traditions.

This kind of activities can easily generate some sort of dialogue/ debate or literary works by the students –commentaries, essays, etc-.

It can also be linked to other activities, such as role-playing games, drama, etc.

➤ **Literary creation.**

Teachers can wisely combine a set of literary forms of expression to make children think by themselves and express themselves about any subject related to human values. Even smaller kids can write a simple poem, middle school children can present a commentary from some significant book or author, elder students can prepare a short dissertation, etc.

Children can also be requested to create stories out of their imagination or under the inspiration of well-known authors to express some value-based message.

These literary works made by students can be presented to an audience, and they can also be exhibited in some literary/ cultural contest or soiree –avoiding a competition culture that can be replaced by a spirit of sharing and celebration-.

➤ **Social Studies and Philosophy.**

Beyond their mere academic component, social studies and philosophy can be wisely turned into profound instruments of value education in an interdisciplinary approach. We develop this issue in the longer 1000 pages book, in particular through a chapter centred on the shift from the robotic system to conceptual education, and from academic to human excellence.

We want to insist here that all the fundamental human values can be apprehended through social studies and philosophy, providing not only a more intellectual or scholarly but also a deeper background to students, bringing them to think in depth and open an earnest reflection on human condition and its transformation, knowing that there is no separation between inside and outside, and also being aware that we are the world –as Krishnamurti always reminded-. Real philosophy can put forward the very core of integral value education: consciousness and transformation –a real, ontological transformation of humanity towards higher states of consciousness and vibration-.

The philosophical dimension –understood in depth- is fundamental to go to the very roots of integral value education –self-inquiry in relation and dialogue towards self-realization-, avoiding the most superficial and dualistic approach to values.

The incorporation of social studies and philosophy into value education can stimulate the creativity of the elder children through research, commentaries, essays, etc, that can be done individually or in group, and that can be later shared with a wider public. The participation of students can also be encouraged through groups of dialogue/ debate. In this field, elder students can be sent outside the school to do research in some institutions and meet social agents involved in the issue at stake.

This utilization of social studies and philosophy from the point of view of value education can obviously be intertwined with other disciplines and activities.

➤ **Intercultural research on topics related to human values.**

Always in ways adequate to the age group and under teacher's guidance, students can combine individual and group research on human values from an intercultural/ inter-religious perspective, searching for cultural expressions of love, peace, compassion, solidarity, etc, through different civilizations and spiritual traditions.

Small children may search for the ways of salutation in different cultures, elder children can compare symbols and myths from the major traditions, and higher secondary students can study in depth the philosophical support for human values in the main civilizations of history.

The outputs of this kind of research can lead to supplementary activities.

➤ **Science and human values.**

Beyond the proper academic dimension, science should also be incorporated into value education, knowing that education in human values really works when there is no dualism or separation.

- First of all, we can raise with students the ethical and philosophical issues connected with science.
- We can even show them how the greatest scientists, such as Albert Einstein, clearly put forward an ethical and philosophical reflection inseparable from scientific investigation.
- Furthermore, the development of quantum physics and new science offers a tremendous potential for value education in an interdisciplinary horizon, nurturing a profound questioning about crucial issues such as interdependence, wholeness, harmony, the role of consciousness, etc.

Quite obviously, the incorporation of science into value education can stimulate the active participation of students through their own creative works, group activities, groups of dialogue/ debate, public presentations, interaction with institutes and social actors, etc.

Value-based science can also be combined with open-air activities: exploring the natural environment, visiting places where some environmental issue is at stake, etc.

➤ **Social service and solidarity in action.**

Always through ways adequate to the age groups and under teachers' supervision with school support, children may be invited to directly experience by themselves the sense of solidarity and integration into the community through some sort of social service, from attending the needs of the most humble to ecological activities for the environment.

In some schools (as we want to do in our new Sai International Schools), social/ community service can be interwoven with scouts/ guides activities.

Needless to say, these social/ community activities can be easily related to other activities suggested above, which means that students can produce some paper or documentary about the task performed, or can do some public presentation about it.

➤ **Field trips, picnics and hiking.**

- Field trips can be highly educational giving the children an opportunity to approach human values in a more direct or experiential way.

This may include visiting temples (from all spiritual traditions), holy places, museums, etc.

It can also involve meetings with some personalities or organizations in connection with some special issue related to values.

In any case, both the preparation and the return may involve some additional activities: before for preparing the trip, after for making some summary or report and sharing with the school, parents or community.

- The school can also arrange a picnic day to some beautiful setting, where different value-based activities may be organized.
- Finally, the school can arrange week-ends or holidays for hiking in the hills, National Parks, etc.
Apart from the physical exercise, contemplation of Nature and community life, value-based activities can again be organized.

➤ **Conclusion. From holiday camps and catechism to integral value education.**

There is always the danger to reduce all the depth of integral value education to some sort of holiday camps and catechism, instead of tackling the very core of it, which, as Sathya Sai Baba insisted, is not less than the real, ontological transformation of the human being towards higher states of consciousness. But as J. Krishnamurti warned, few human beings really face the challenge.

THE FIVE DOMAINS OF INTEGRAL EDUCATION.

Pancha Karma (in Sanskrit): Five Actions.

A FIVE-FOLD PEDAGOGY TOWARDS A NEW HUMANISM AND A NEW HOLISTIC PARADIGM.

I.The relationship with the Environment and the Cosmos.

Our schools will be preferably located in the countryside or in the city outskirts, and will try to have their own farm and garden, so that students will grow in contact with animals and plants -a fundamental dimension of education which is often neglected-.

Moreover, the school farm and garden will provide fresh milk, vegetables, fruits, etc, to the community of students and teachers.

The syllabus will arrange some periods after the evening workshops to organize in a more structured and pedagogic way this fundamental contact with Nature through different activities in the school garden and farm.

The schools will naturally allow and encourage a more informal contact in the free time, something that will be facilitated by the existence of common gardens among the buildings of the campus.

In parallel to that, the outdoor activities planned during long week-ends and holidays will nurture a deeper relationship with the environment, apart from their intrinsic communitarian dimension. Our schools will organize special excursions, hiking and trekking in natural settings famous for their beauty and biological value, like the Nilgiris in South India or the Himalaya in the North.

Finally, the hustle and bustle of a group of Scouts and Guides in the campus shall hearten the love for Nature and the practice of outdoor activities with their corresponding skills.

I b. Physical exercise (sports and games) and education for integral health.

Sports and games (like playing) are not only important per se but also in order to enhance cognitive skills and general functions –as proved by neuroscience in the last decades-.

- Stressing in sports and games cooperation and team spirit rather than competition;
- Cultivating an integral vision of health and awakening the sense of harmony and beauty, in the awareness that the body is the temple of the soul, that is, the unity of the physical and the spiritual in a holistic world view.

Our international schools will offer a vast area for sports and games, Including, for instance:

Sports grounds:

- Cricket
- football
- basketball
- volleyball;
- an indoor stadium for gymnastics
- an outdoor stadium for athletics
- and a swimming pool.

We will also value and integrate traditional Indian sports such as **Mallakhamb** (pole gymnastics) and **Kushti** (wrestling) -**especially suitable for boys** to release their energy, which mainstream schooling does not allow too often-.

Students will be able to make a choice among several options, although some basic gymnastics and athletics will be recommended to all.

Our schools will also include in the curriculum a programme of education for integral health and hygiene.

On Saturdays and even Sundays, which will be free from ordinary schooling, an additional practice of sports, games and free playing will be offered on an optional basis –as we shall also offer scouting and additional workshops of fine/ visual arts, music, dance, drama, yoga, etc, on an equally optional basis-.

II.

The relational realm and dialogue.

The value and depth of human relationship and the sense of community, brotherhood and unity.

Positive values, character, ethics and the psychic domain (love and compassion).

The relational and communitarian dimension will be nurtured by hostel life for residential students; day scholars will experience it through the campus routine and special open air activities in Nature such as summer camps or long week-ends including hiking and trekking.

In particular, we will stress in our campuses the pedagogic role of elder children towards younger while mixing age groups,

And the personal attention and care given to each student by teachers through formal and informal tuitions or tutorials.

In addition to that, every student shall select a teacher as his personal guardian in the horizon of the Gurukula –the relation between master and pupil in Ancient India and other spiritual traditions of mankind-.

This educational domain will promote emotional intelligence, a set of positive values in terms of character, ethical principles, organizational and management skills, leadership with wisdom, and love and compassion for all beings;

this fundamental dimension of education will be strengthened by the combination of love and (self) discipline in a genuine value-oriented culture.

“From the most impressionable years, the children should be taught to cultivate love for all. Love leads to unity. Unity promotes purity. Purity leads to Divinity.”

Sathya Sai Baba.

The relational and communitarian dimension will be associated to a programme of service to the community and the most needed.

At the same time, our school will host a group of Boy Scouts and Girl Guides under the double umbrella of the National/ World Organizations.

The relational and communitarian dimension of education should be a direct translation of the relational nature of the universe and life, something that different branches of new science, like quantum physics or relational theory, have revealed in convergence with the teachings of wisdom contained in the traditions of spiritual philosophy both in the West and the East.

The relational dimension implies dialogue in all spheres of human life: from the social, cultural and religious planes to the realm of consciousness.

Relation and dialogue, understood in depth, both at the external and internal levels, constitute the pillars of the new paradigm in emergence, and the very core of those higher states of consciousness that integral education should foster.

In particular, the Socratic kind of dialogue that we also find in the Indian Upanishads, directed towards self-learning, self-knowledge and self-realization, should nurture the whole educational process and campus life.

For this, we shall organize groups of dialogue within the school, teaching students how to tackle both personal and social problems, helping them to become aware of the mental blocks and obstacles, and finally, accompanying them into a process of self-observation and self-inquiry.

The whole pedagogy of the school should incorporate an education for dialogue (at all levels: internal or intra-personal, inter-personal, socio-political, intercultural, inter-religious, etc). In this horizon, our school will follow the path open by eminent scientists like D. Bohm, philosophers like R. Panikkar, and sages like J. Krishnamurti.

Our students should become open-minded and compassionate adults, capable of having an earnest dialogue with others in their professions and private lives, and contributing to find peaceful and constructive solutions to the problems that individuals and societies face today.

Let us see in more detail how the relational domain can be implemented through the school life:

- In the hostels, residential students will be responsible for some aspects of their environment and routine, cultivating **self-reliance** and a sense of maturity.
- In parallel to that, the hostels, classrooms and the whole campus will structure different forms of **responsibility** and **monitoring**, through which tasks shall be given to students, while elder children will also take care of the younger -for supervision of the scheduled activities and duties, and for maintenance of the needed discipline through a feeling of loving and brotherly care-.
- In all **outdoor activities** stretching over long week-ends or holidays, the pedagogic care of the elder children towards the younger will be equally promoted.
- In general terms, the outdoor activities will strengthen the active role, responsibility and maturity of all children in ways appropriate to their age.
- Even in the normal routine of the school this double approach of self-reliance and monitoring will be implemented, especially through the **afternoon workshops**, where children will act as assistants to the teachers, conveying to their mates what they will have already received from the teachers, while the elder can always take care of the younger.
- The students will also participate in an active way in the maintenance of the needed discipline in the **campus life**, inseparable from this atmosphere imbued with love and human values.
- The schools will also set up **some channels** to listen to the children and get a necessary feed-back from them in order to take their points of view into account in a balanced approach.
- Moreover, every student will choose a teacher as his **personal guardian**.
- Finally, our institutes will hold a **School Parliament** on certain occasions, so that the children can already experience the sense of democratic participation and citizenship.

Philosophical implications of the relational/ communitarian dimension.

Quantum physics and new science have discovered the relational nature of the universe –something that mystical philosophy already knew many centuries back-.

If reality is essentially relational, could education avoid the relational dimension of life in the pedagogic system? The educational process must consciously incorporate the relational nature of Man and the Cosmos **at all levels:**

- in human relationship and community life, of course;
- in our interaction with the environment too, arousing the feeling of harmony with the Cosmos –which lies at the root of Greek culture and the word “cosmos”;
- and even at the level of the mind, enhancing a quality of thinking that is capable of establishing relations between concepts, topics, disciplines and dimensions of reality;
- ultimately, at the deepest level of our inner life, integrating the different domains of our multidimensional nature in dialogue with others.

The relational dimension of Man and the Cosmos brings into the picture another fundamental facet of life: **dialogue.**

- Certainly, we must teach students about the crucial importance of intercultural and inter-religious dialogue in the social and cultural planes.
- But we must also help them realize how important dialogue can be in personal relationships.
- Then, we must take one step further: from intercultural/ interpersonal dialogue to internal dialogue, which means the knowledge of oneself; only this awareness can open ourselves to the experience and the discourse of others. The observation of oneself and the sensitiveness for others are inseparable. Only this non-duality –“advaita” in Sanskrit- can interweave the I and the You. From I to We: this is the core of the transformation of humanity towards higher states of consciousness and vibration.

Eminent figures of the XXth century, like the scientist D. Bohm, the sage J. Krishnamurti and the philosophers R. Panikkar and M. Buber, have shown the tremendous significance of dialogue for the future of mankind, in all spheres, replacing intolerance, confrontation, domination and imperialism. Furthermore, they have insisted that dialogue does not apply to the social arena only, but to the very core of human consciousness. Only with the realization of our inner blocks through relation can we open ourselves to dialogue with others. Hence, education must be essentially Socratic.

The relational/ communitarian side of education:

- will foster emotional intelligence,
- and will promote a set of values and positive attitudes in terms of character among students, for instance: self-discipline, maturity, tolerance, responsibility, self-reliance, time management, collective life, cooperation and sharing, brotherhood and unity, etc;
- at the same time, it will enable students to develop organizational capacities, management skills, team work and leadership with wisdom, which will be very useful in their future adult life.

In parallel to that, our campuses will try to keep alive the teachings of Ancient masters like Buddha and Jesus, or modern sages like J. Krishnamurti.

The message of love and compassion has been given for generations to come, but it has been easily forgotten by mankind on the Planet Earth.

Few philosophers in the modern age have cast a clearer light upon the matter of relationship and the mind as J. Krishnamurti, who repeatedly warned that only the genuine warmth of love, with its unique vibration, can bring a significant change into the human being and therefore into society. In his own illuminating words: life is to be completely lived in the plenitude of love. This is the only revolution that can bring a new world. (“The Mirror of Relationship: Love, Sex and Chastity”).

More astonishing for the common perceptions in this world: Krishnamurti informs that love does not belong to the mind, and is independent from thought. Love is pure; it is not an ideal, it is a state of being. Love is something that is always new, fresh, alive. It has no yesterday and it has no tomorrow. Only the innocent mind knows what is love.

In the last years, Sathya Sai Baba has stressed this fundamental message of love and compassion for mankind. Love is not a feeling or an emotion, but a state of consciousness –like peace-. Only when this state of consciousness is real, is there a real transformation of the human being.

“Love alone can alleviate anxiety and all fear. Love is joy, love is power, love is light, love is God. Love helps you to see God in everyone, everyone as Divine.”

Sathya Sai Baba.

III.What about Academics?

Academic excellence towards the best conceptual education.

Through our educational task in our new schools, we will try to limit the time for academic training and the amount of information, aware that in the present syllabi, especially in India and Asia, there is an excessive amount of information which is neither understood nor digested by the students, but only memorized for the tests, and immediately forgotten once the exams are over. Quantity of information does not mean good education.

We will develop in depth the best conceptual education:

- bringing students to understand the fundamental concepts, while they really assimilate the basic facts and some general knowledge;
- in an intelligent and profound way, so that they are able not only to have but to search for information, so that they are able to learn how to learn, think, do research, be creative and free, and express themselves.

We will foster the highest academic excellence: not through quantity of information, but rather through quality -understanding, intelligence, thinking and creativity-, stressing in particular the importance of critical thought –with values-, creative thinking and imagination. Values can counterbalance the tendency towards hyper or negative criticism.

In this line, we will teach students how to study, how to learn and how to think by themselves, equipped with the fundamental empirical knowledge and concepts, but mainly, equipped with intelligence and capacity for understanding, thinking by themselves, innovating, being creative and expressing themselves; the capacity of communication and transmission is also fundamental -written and oral-.

In Asian countries like India, rote memorization through the robotic system has eroded conceptual education and thinking, and tests have discarded proper education.

But in European countries like France, fine conceptual education has overstressed the rational intellect, neglecting other facets of human intelligence –which is multi-dimensional, like the whole human being and the cosmos-.

A balanced integral kind of education must certainly develop the rational mind with conceptual, abstract, analytical, critical thinking; but it must also foster other fundamental human capacities like creative thinking and imagination. Furthermore, it must integrate the relational, emotional, ethical, aesthetic and spiritual dimensions of human life.

Through a comprehensive and holistic approach to education, we will aim at harmonizing the two hemispheres of the human brain –left and right-, and hence, all the different dimensions of the human being.

In this humanistic horizon, academic excellence will not disregard any child –unless he or she cannot follow at all the prescribed curriculum-; for this we offer a campus that integrates the various branches of academic schooling, various artistic disciplines and various areas of vocational training.

We will always try to be aware of the multiplicity of geniuses –which means that each child or human being has his or her own genius to be unfolded-.

We will also adapt our curriculum to those **children with specific requirements**, especially those diagnosed with **dyslexia**; apart from the appropriate treatment –which will be basically good for all children-, a more oral kind of education –as in the ancient traditions- focused on the creative facets of human intelligence can be more suitable for the more acute cases, whose number has increased in the last years –while it becomes clear that both the causes and the degree may vary according to the individuals-.

Dyslexic children have their own genius too, that an intelligent school system should be able to unfold. In fact, great historical figures from the past were dyslexic, while the robotic and bureaucratic school system of the modern age has marginalized them. For some of these children -and also for others- the Arts Syllabus might be more adequate –or vocational training-.

In particular, we will stimulate among our students **relational and dialectical intelligence**, that is, the ability to establish **relations** between ideas, topics, subjects and even dimensions of reality; as we will discuss below, even the universe and life are essentially relational.

In dialogue with spiritual philosophy, new science has overcome the limits of the Newtonian model. The modern age of mechanism has petrified reality, which means that this has been a culture of things, and therefore, nouns. We must come back to an education and a culture that flow with the flux of Being, that feel the Rhythm of Becoming, that perceive the relation and not only the thing, that think in terms of verb and not only of noun.

In this perspective, the Socratic kind of dialogue –directed towards self-learning and free/ creative thinking- becomes the very foundation and spirit of the educational process.

In this kind of pedagogy, the interdisciplinary approach becomes indispensable, linking the traditional academic subjects and unveiling the unity of knowledge.

By doing so, we will deepen into the pedagogic system of the International Baccalaureate, to which we will apply, and which incorporates thesis, essays and projects in a very comprehensive way until 12th class, when students must prepare a whole thesis as a fundamental part of their final exams.

Sai International Schools will combine in a balanced and harmonious way the most valuable contributions of the 5 major schools of educational philosophy: Idealism, Existentialism, Naturalism, Realism and Pragmatism.

Even though our institutes will be grounded in Philosophical Idealism and the great traditions of spiritual philosophy and wisdom,
they will be open to an enriching dialogue with the other main schools of pedagogy, attempting to implement a middle path that avoids the extremes that the history of education has witnessed,
in order to develop a truly integral education that combines academic excellence and human values/ self-inquiry for the sake of the children themselves.

This means that our schools will integrate in a balanced way a series of methods of teaching and pedagogic tools.

It is also important **to educate children as multilingual cosmopolitan individuals**, capable of communicating in other languages while being open to other cultures, visions and experiences.

Neuroscience has proved that bilingual or multilingual kids are neurologically gifted in front of monolingual kids.

Beyond language and its neurological implications, education must shift from monolithic cultural imperialism to intercultural dialogue and international understanding.

Students will produce their own **illustrated summary of coursework** in primary and middle school, and more academic coursework later.

All the students will have a **school diary** where homework, special activities and general information for the parents will be described; moreover, this school diary will include a **tutorial section**, where the teachers and especially the tutors/ guardians will inform parents about the child's evolution. The use of the diary for communication will never replace a direct personal interaction with the parents.

Concrete pedagogic methods:

- traditional academic lectures through the prescribed subjects with systematic lessons, in order to bring the basic information and concepts in a clear and coherent way; lectures should not be a dry exposition of facts, even though basic facts must be learnt; rather, lectures must constitute a scholarly exposition that incorporates research, understanding, questioning, thinking, intelligence;
 - at the same time, the millenary Socratic method or informal dialectic method shall be encouraged, bringing students to be active listeners and to actively participate: to ask, question and think by themselves –for which, this kind of pedagogy constitutes the basis for active learning as detailed below-;
 - dialogue and discussion, centred on special issues and problems, as a complement to the traditional and necessary lecture method, and as another facet of active learning;
 - active participation of the student in the classroom, open to questions and dialogue, and also through more specific activities towards active learning;
 - instead of giving all the information to students who passively memorize it, we must encourage them to do research by themselves, create something from their own, and then present and share their work –self-expression-.
-
- inductive/ experimental methods, through observation, research, investigation, exploration and experimentation; direct experience –experiential knowledge-;
 - more academic experimental methods, especially in sciences and in contact with the environment, so that the students discover and experiment by themselves;
 - projects in sciences and technology, mainly through groups;
 - compositions, commentaries, summaries, essays/ dissertations and small thesis in the humanities and languages, mainly on an individual basis, so that the students learn to think and express themselves;
 - projects and essays in social studies, both on a group and individual basis;
 - oral presentations by the students for their class-room or the school assembly;
 - case study and problem solving –for a diversity of disciplines-.
-
- educational activities, appropriate to the child's nature and needs and to the age group, encouraging him to investigate, explore, discover and do by himself; however, this should be used in a moderate way that does not dismiss the necessary academic training, and thus avoiding certain abuse committed in the last decades; the Socratic role of the teacher can never be dismissed.
 - play-way methods/ materials –without excess-, especially in kindergarten and primary school, although some more mature or elaborate play-way methods/ materials can also be used in middle school;
 - sensory training, especially in kindergarten and early primary school;
 - the schools will be open to modern educational technologies and the use of computers and audio-visual aids in the class-room, but, again, in a moderate and balanced way, warning against the abuse of these pedagogic tools which turns against the quality of education in depth towards alienation and technocracy.

General pedagogic methods.

- Instead of blind rote memorizing for mechanic tests, our schools will fully implement conceptual education directed towards understanding, research, thinking, creativity and self-expression, stressing the value of critical/ creative thinking and imagination, together with conceptual, abstract or analytical skills.
- In general terms, the schools will use ideal-centred methods of teaching; while teaching any subject, we will bring out the dignity of the human being, the worth of life, and the fundamental human values.
- Moreover, the schools will incorporate a paido-centric or child-centred pedagogy, refusing to mould the child in a forceful way without taking into account his or her nature and tendencies; this child-centred pedagogy implies a profound respect for the child, for every child and the uniqueness of every human being –unfolded through a proper and caring guidance-.
- The schools will also promote the self-education of the child –self-learning-, so that he can search for information, do research, experiment and experience, discover, do, practise, learn, think and create by himself, under a teacher’s supervision that brings the needed loving guidance but never becomes coercive or overwhelming. Here, we can be inspired by Steiner’s artistic/ creative ways of teaching or Montessori’s self-teaching materials (exercises and activities).
- In the framework of the prescribed syllabus with its specific subjects and required standards of knowledge at every stage, the schools will allow a certain capacity of selection to the student, through optional subjects and even more through the afternoon workshops of holistic education.
- This capacity of selection can also be expressed through creative ways of assessment with the realization of projects, essays, thesis, problem solving, etc.
- In general terms, we must allow to a certain extent that the student chooses and creates his or her own curriculum according to his or her own nature and tendencies towards self-knowledge and self-realization.
- We have said that our schools will strongly oppose the so common practice in India and Asia of rote memorizing without any understanding; however, the schools will not promote the opposite extreme, which has been sometimes reached in Western countries in the last years and which discards any kind of memorizing. The school will acknowledge some space for the use of memory, especially in the earlier stages but also later when required, to nurture it as a human capacity that has its role to play, but always as an instrument of the fundamental capacity to understand and think, that is, intelligence and creativity with genuine freedom and inquiry.
- The schools will incorporate sensory training, especially at the earlier stages; gradually, the accent will shift towards creativity, imagination and expression, and then intellectual training –always in a humanistic perspective aiming at self-knowledge, transformation and self-realization-.

About (self) discipline:

- The schools will give freedom to the child, but in a wise way, avoiding the misunderstanding that has become so common in Western countries in the last years; hence, we will promote qualified freedom, guided and regulated freedom, directed towards creativity and activity, and ultimately, self-knowledge and self-realization.
- At the same time, this qualified freedom will be accompanied by the development of a sense of ethics and responsibility.
- Furthermore, qualified freedom will be tuned with the development of self-discipline, promoting the internal moral controls that make external coercive controls less necessary. From this point of view, our schools will be inspired by Kant.
- THE SCHOOLS WILL PROHIBIT ANY KIND OF PHYSICAL PUNISHMENT –still massive in India and Asia-.
- Instead of negatively reprimanding, we will put forward a system of (self) discipline that confronts the child with the consequences of his/ her wrong deed -as emphasized by Rousseau- towards a positive transformation.
- The schools will implement the necessary discipline tempered by sympathy and the fundamental value of love; love and discipline –towards self-discipline- constitute the two pillars of education.
- For eventual problems of discipline of a more serious nature –that should not normally happen or very exceptionally-, the schools may envisage the banning of the student from the premises for one or several days so that he realizes the value of school and hence education –realization instead of mere punishment-.
- However, our schools will always try the path of a positive transformation of character through love/ human values while helping children realize things.
- The children themselves may be involved through different ways in the campus discipline –directed towards self-discipline-. This does not mean that the children become judges of their mates –replacing the teachers-; rather, it implies the idea of relation and dialogue under teacher’s guidance to solve problems in constructive ways bringing out a positive transformation.
- Discipline should not be regarded as a coercive policy in the hands of the adults – teachers-, but as a transformative process that every child or youth will undergo with the help of his mates –students- and guides –teachers- within the whole school community - through sympathy, love, self-observation, introspection and dialogue-. Then, the human being is again rooted in its essential communitarian dimension, while education is understood as the whole process of human life –instead of negative reprimanding/ punishment-.
- Here comes into the picture a culture for dialogue and groups of dialogue –rather than school courts and teachers-policemen-. It is the general deterioration of dialogue and values that has brought the police into the schools in the Western world. It is repression that creates the need for coercion.

About evaluation.

- In the framework of the syllabus to which we shall apply, the International Baccalaureate, we will tend to avoid the pedagogic aberration so common in India and Asia consisting of blind memorizing without understanding just to get marks in dry tests devoid of any creativity and scope for thinking.
- This means that our schools will prefer -in general terms- the realization of projects (both on a group and individual basis), problem solving, case study, different kinds of composition, commentary, essay and dissertation –so well developed by French schools-, oral presentations, etc, involving direct experience/ experimental methods, research, inquiry, exploration and self-learning, free thinking, creativity and self-expression, in ways appropriate to the age and scattered on a regular basis throughout the school year with enough time for preparation under the needed guidance –never overwhelming-.
- The schools may also use small question exams on a regular basis for the different subjects so that the teacher can check the assimilation and understanding process undergone by the students; even these short regular exams should not operate on a blind memory basis, but should incorporate questions that require for the answer remembering the basic facts and also understanding and thinking.
- In general terms, the evaluation must utilize creative ways of assessment that develop conceptual education in depth in a humanistic horizon, excluding mechanistic tests that stupefy the minds of the children and reduce all the depth and beauty of education to a robotic system nurturing fear, anxiety, alienation, repression and coercion –all the evils that humanity must overcome through a humanistic form of education-.
- Our schools will pursue academic excellence without pressurizing the child, for which we shall implement a global/ continuous evaluation system that considers the child as a whole and first of all as a human being.
- As we will develop below, we will make a sensible use of classical instruments such as dictation, summary of reading and composition together with an intelligent teaching of grammar towards understanding and expression.
- The schools will give homework to the students on a regular basis, always adequate to the age, and without falling in any extreme, neither lack nor excess. Homework should be creative and complementary to the main work done at school.
- Another important pedagogic point of our schools will be the individual attention that every child or youth shall receive -as stressed by Rousseau-. For this, every student will have academic tutors for the matters related to the syllabus –apart from the main class-teacher-; moreover, we will request children to choose a personal guardian –more informal- who will take special care of them, more in the line of the ancient Gurukula. Needless to say, some timings will be arranged for those individualized tutorials/ guardianships, even though the tutors and guardians will be always open to any demand from their students; in fact, the school will encourage teachers to look after any student at any time.

This kind of conceptual education towards true excellence should make use of **classical instruments in the field of language, such as: grammar, dictation and composition.**

- In this approach, composition should be a classical tool to be fully integrated in the curriculum. Our students will practise all the traditional kinds of composition: description (of places, people, events, etc), explanation, summary, commentary of text (both for the form and the content), fiction or story, poetry, and essay (on one concrete topic from any subject, or free dissertation in any area of knowledge, preferably through an interdisciplinary approach).
- The systematic practice of composition after an intelligent learning of grammar, reading and spelling (through dictation), will enable students to master the language, speak and write not only correctly but even with excellence, think by themselves and express themselves; in fact, this constitutes the most fundamental goal of any pedagogy at the level of academic learning which is not satisfied with blind memorizing or overwhelming technology.
- The importance of reading (quality literature). In a world becoming more and more uncultured with an increasing abuse of technology, we must come back to the healthy, even indispensable, practice of reading good literature, virtually lost in many schools of the Western world today. We are not talking here about the compulsory reading prescribed by the syllabus; what we suggest is that children, and especially adolescents, should read other books out of the syllabus, always appropriate to the age –not only the classics of youth literature, but also the classics of the main literary traditions of mankind-. Any good school should encourage youths to do so, and should guide them to get to know the authors and the titles, and select something according to their interest.
- **The active participation and creativity of the student through homework and continuous assessment.** Teachers must encourage children to produce or do something of their own –appropriate to the age and the subject-, such as: summaries, commentaries, essays, drawings, graphics, maps, diagrams, graphs, charts, models, experiments, problem solving, case study, oral presentations, projects, etc. The more direct, active, creative and experiential method is fundamental for the blossoming of the child from inside.
- **From reading to writing and speaking: self-expression.** Our students will find an inexhaustible source of inspiration in the reading of good literature in order to express themselves not only correctly but even with quality –which is especially important in countries like India due to the general academic weakness and the limitations inherent to the learning of English language-.
- **The process towards excellence in self-expression should aim at writing and speaking.** At the level of oral expression, we must train students to dare to speak in public -in such a way that they can give a message in depth and also attract the audience-.
- Expression of original thinking. A fundamental part of academic excellence consists of training students to express themselves, certainly; but what students must be able to express is their own original thinking, capacity of research and creativity. Hence, academic excellence must also teach the fundamental facets of human thinking in all spheres of knowledge: research and recollection of data, description and classification, analysis, abstraction, synthesis, concept formation, critical thought, creative thinking, imagination, etc.

In terms of Syllabus: from the I.B. to an open/ free curriculum.

Sai International Schools will preferably follow an international syllabus, the International Baccalaureate (IB), run by an international organization based in Geneva (Switzerland) and recognized by national authorities.

They should also be connected with the programme of education in human values inspired by Sri Sathya Sai Baba (together with other sages and philosophers).

Nevertheless, this educational project can be adapted to any school or syllabus. What we present would be an educational model, open and flexible, to be adopted with pragmatism and to be adapted to the context of every school.

Moreover, the Project can be implemented independently from any official affiliation by creating our own syllabus with the help of sites such as Tata, Vidya Vahini, the Khan Academy, etc, or similar settings created by the world top universities. In this context, a free school can also have formal links with Open Universities/ Schools. Needless to say, this kind of free school will adequately prepare children for public exams at the appropriate age.

In India, these will obviously be **English-medium schools, true** English-medium schools, where students will learn to speak and write in correct English of international standards, breaking with this mass of pseudo-English-medium schools in India where even teachers are unable to speak English correctly. At the same time, we will teach other Indian languages (like Hindi or Telugu) and some European languages apart from English (like Spanish).

In other countries, our schools may combine the national/ regional language and English for the normal teaching –apart from other Foreign Languages-.

Our schools will also offer **a basic study of the classical languages** for their cultural heritage and their educational potential: **Sanskrit/ Pali, or Greek/ Latin.**

It is not our intention to train specialists of ancient languages, and we want to educate boys and girls of the XXIst century that make a difference and bring a significant contribution to their epoch. However, the study of classical languages can still be invaluable today, especially if it is used as a tool to provide solid grounds of classical culture together with some rudiments of language helping students to better understand their own European languages – through Greek and Latin- or Indian languages –through Sanskrit-. Furthermore, a basic knowledge of Sanskrit allows children to pronounce Vedic “mantras” and “slokas” and to chant Vedic/ Upanishadic hymns –which constitute a unique spiritual treasure for the whole of mankind and not only for India or Hindus-. Finally, all classical languages stimulate intelligence, thinking tools and aperture of mind; they constitute wonderful athletics for the mind –together with the sound cultural and spiritual inputs which they naturally incorporate through the study of classical literature-.

The International Baccalaureate and Comparative Education.

The International Baccalaureate from Geneva is not only an excellent syllabus tending towards integral education with international recognition, but also the fruit of several decades of earnest research in the field of Comparative and International Education.

Comparative Education is today an established academic field of study that examines education in one country -over time or across different areas or strata- or in a group of countries.

Hence, both single-county studies and the cross-national dimension have been developed enriching each other.

Scholarly work has identified **four main objectives of Comparative Education:**

- To describe educational systems around the world.
- To study the relationship between education and the social context in different countries.
- To assist in the implementation of educational policies.
- To propose an educational theory that may be valid in more than one country.

Comparative Education:

- Has evolved through centuries from the chronicles of travellers in the past to the scholarly and scientific methods of the contemporary academic world.
- Has developed as a recognized academic field at the crossroads of several disciplines such as education studies, sociology, political science, economics, international relations, statistics, etc.
- Therefore, it is an ideal field for interdisciplinary work.
- It is supposed to use data and scholarly research methods as an empirical social science approach.
- However, it should combine intuitive insights and speculative reflections with empirical, systematic testing following the methods of social sciences.
- In any case, it has been criticized from an intercultural point of view for its deeply-rooted ethnocentric (Western-centric) bias.

IV. Aesthetic and emotional education.

Fundamental for the human being, through:

- the humanities (classics, poetry, literature and philosophy),
- traditional fine arts (drawing, painting, modelling/ sculpture),
- modern visual arts (photography, cinema/ video, graphics and computer design),
- music,
- dance (not only for girls but also for boys),
- drama/ performing arts.

* Always in an intercultural perspective Eastern/ Western, focused on the classical traditions of both the West and the East.

* From a value-based philosophy, bringing students to discover the fundamental human values through a comparative history of art, and ultimately, to experience and express values through their own creativity.

*And through the Socratic kind of dialogue, bringing the child or youth to unfold his own potential from within towards his self-realization.

Aesthetic education implies not only the aesthetic taste, the sense of beauty and imagination, so important for any educated person, but also the creativity and self-expression of the human being, together with sensitiveness and emotional intelligence in depth.

At the same time, classical music, art and literature promote higher states of consciousness through the higher vibrations that they convey, becoming, for that reason, a powerful instrument of value education towards the transformation of the human being.

Not only Greek but also Indian philosophy have stressed the value of Beauty and its potential for a positive transformation of the human being. As the Romantics proclaimed so emphatically, Beauty is the face of the Absolute. A profound kind of education must surround the growing child with beauty –in Nature for instance- and must nurture the young minds with beauty –through the Arts and Humanities-.

Furthermore, art can also offer a tremendous therapeutic potential (art-therapy), which has produced astounding results with difficult youths, removing psychological blocks and helping the growing human being to better know himself and hence transform himself.

In the field of art, our schools will allow a certain space of freedom and selection for students, so that they can build their own curriculum according to their interests and tendencies.

Nonetheless, the schools will also make sure that all the students pass through the different artistic disciplines for a minimum period of time, in order to unfold the integral kind of education that we want to provide.

Only by exploring the various areas and fields can the growing child discover his or her own vocation and skills. Child-centred and holistic strategies are inseparable.

For higher secondary school, we shall offer a twofold programme within the framework of the International Baccalaureate (IB) to which we will apply:

- the more strictly academic IB Diploma Programme;
- and the IB Art Programme, comprising four sections:
 - Visual Arts,
 - Art/ Design,
 - Music,
 - Theatre/ Performing Arts.

Even before 16 years, we will arrange special artistic education in any discipline for those children who show a special talent and vocation.

Students shall be able to pursue these different artistic disciplines later on, and get graduate/ post-graduate degrees from the Arts Schools which will be part of the International Colleges.

Aesthetic/ artistic education must be twofold:

- on the one hand, we must teach history of art (always in a comparative perspective), underlining the human values inherent to artistic creation, and finding in the works of great artists a source of inspiration;
- on the other hand, children and youths must directly practise the different artistic disciplines, so that they can experience by themselves, be creative and express themselves.

As we have stressed above, **art education must also be:**

- intercultural,
- and value-based.

Moreover, **the artistic practice should combine:**

- The learning of basic techniques and skills, without which creativity is blind;
- and the creative expression of oneself, without which pure technique is dull.

Our schools will finally emphasize **the pedagogic function of the great masters**, from whom we can all learn a lot, and whom have been dramatically dismissed by the last evolution of post-modern culture.

In the fine arts as well as in music, students can be deeply inspired by the works of the great masters; if performing the main composers seems to be ineluctable in classical music, **copying both Nature and the major painters** should also be seen as pedagogically vital in the fine arts, although the process of learning must always be directed towards **creativity and self-expression**.

- Our schools will certainly come back to the grandeur of the classical traditions – Western and Eastern-, just overlooked by the postmodern age –without denying the value of indigenous cultures, especially for the countries where they are still alive-.
- We will also invite students to discover the genius and significance of modern art in all the fields and disciplines in a balanced perspective.
In music for instance, we will not neglect the role of pop music, making students realize that pop music has sometimes conveyed human values while incorporating valuable creativity.

The history and general teaching of art must show the diversity of artistic expression through civilizations, periods, schools and artists, both in the West and the East, and set forth through a sensitive and humanistic approach:

- the historical, social and cultural context of the artist or work of art, so that the artistic expression or aesthetic experience can be located in historical/ contextual terms – without which, we can distort their process and meaning, and misunderstand them-;
- the cultural differences between artistic traditions, and in particular,
- the profound differences between the traditional/ metaphysical vision of art in the East and in Ancient/ Medieval Europe and the modern/ Western aesthetic notions;
- the pedagogic role of art, from which we can learn valuable teachings about human condition, ourselves or metaphysical dimensions, and therefore,
- the therapeutic function of art in order to understand and express ourselves, breaking many mental/ emotional blocks, unfolding our deepest nature, and releasing our capacity of expression;
- finally, the potential of art for transformation, conveying by itself higher states of consciousness and vibration, and hence, helping us to moderate or cleanse lower tendencies and ascend towards loftier levels of humanity.

The last developments of neuroscience have evidenced the impact of music and art on the human brain, stimulating areas of the brain which are responsible for higher cerebral functions. The transformative potential of music and art has today a neuroscientific basis.

There is an artist within each one of us, this unique genius of each child or human being that aesthetic and humanistic education will unveil through a caring and loving guidance.

In parallel to neuroscience, a number of experiments have shown that beautiful music has a positive impact on plants whereas ugly music has a negative impact. Moreover, recent scientific research has discovered that beauty has a positive impact on important glands of the human body whereas ugliness has a negative impact. Can we deny the fundamental role of beauty and art in the educational process?

Music for transformation:

Classical music has not only an aesthetic dimension –which is already valuable-, but a more general impact on the human being –and even animals or plants-, with positive effects at all levels: physiological, psychological, emotional, intellectual/ academic, and even spiritual.

Ultimately, classical -and sacred music even more directly- may help the human being to unfold the universal human values from inside, and rise towards higher states of consciousness and vibration.

Then, music may become a powerful instrument for transformation in holistic value-based pedagogies.

We can remember again all the experiments implemented in the last decades which manifest the positive influence of classical/ spiritual music on the human being and all living beings: plants growing better with beautiful music, rats becoming cleverer, students performing better, etc, even water producing finer crystals.

From this point of view, Romantic music contains already high intrinsic values, but Baroque and on top of all, W.A. Mozart, seem to produce the most profound impact on the human being and all living beings.

Needless to say, the ragas of India have also a tremendous potential for value education – and the same would apply to other musical traditions of mankind-.

“Music is God.”

Sathya Sai Baba.

*“Music gives a soul to the universe,
Wings to the mind,
Flight to the imagination,
And life to everything.”*

Plato.

V.Education in Human Values: Educare/ Bala Vikas. Education from the Self and the spiritual dimension.

The pedagogic philosophy of our schools will be based upon Human Values as the very foundation of education, which is known as Educare –in Latin- or Bala Vikas –in Sanskrit-: holistic education from the inner spiritual being, following the major traditions of spiritual philosophy and wisdom of Europe, India, Buddhist Asia, etc. This is also known as the development of character education in depth.

“Education must lead to the realization of the Self that is in everyone.”

“The primary purpose of education is to enable one to manifest the divinity within him.”

“Education has to make a person the concrete embodiment of the higher reality that is the basis of the material universe.”

Sathya Sai Baba.

Our aim is to help the growing human being to awaken to himself, to unfold all his potential and his innermost nature, in profound sympathy to all beings, in love and compassion to all. Is there something more important than knowing who we are –in depth-? With the crisis of education and values in the contemporary world, especially in Western societies, this is a path that may offer a more meaningful life to persons and a better future to mankind. It is a door opening to a real change from within, the only true revolution, which is the transformation from inside.

We cannot change the world, but we can change ourselves; and this is the only thing that really changes the world. We are not separated, everything is linked with everything, as mystical philosophy and quantum physics have revealed. Interdependence lies at the very core of Reality.

“If the world has to be changed, there has to be a mental transformation at the individual level.”

Sathya Sai Baba.

Education in its deepest sense means transformation.

To educate means to guide the growing human being in a process of spiritual transformation.

The key lies in consciousness, the ascent of consciousness and the whole being towards higher levels of vibration, which in return affects the physical body and matter itself; hence, the astounding cases of self-healing that medicine has been studying in the last years, and the growth of psychosomatic research and epigenetics.

“Teaching and learning have both become mechanical routines. They have lost the freshness and joy.

The value of the teaching process lies in raising the level of consciousness of the learner, in heightening the sense of wonder and awe, and in emphasizing the unity of one with all.”

“Students should realize the cosmic power that is possessed by each individual.”

“The school is the place where the consciousness is aroused and illumined, purified and strengthened.”

Sathya Sai Baba.

Psychosomatic studies have shown how negative emotions and thoughts have a negative incidence on the body, facilitating therefore the manifestation of sickness. At the same time, science is acknowledging today the power of the mind to affect the body in a positive way, strengthening our health and even making us capable of healing ourselves. Amazing cases of self-healing have been medically recorded.

The confluence between psychosomatic studies, the Observer Effect of quantum physics and the new field of epigenetics confirms what mystical philosophy had stated centuries back: we can be masters of our destiny –at least to a certain extent-. This is the highest dignity of the human being, and his or her genuine freedom –beyond the mere socio-political levels of freedom-.

Mechanism and determinism belong to the past, like materialism –a past age of separation and selfishness, division, conflict and destruction-. The paradigm shift is in motion, and new perspectives are open for human beings to realize themselves, to manifest their inherent divinity, in a vision of unity in diversity.

The sharp opposition between mind and matter, typical of the mechanistic science of Industrial Revolution, is not sustainable any more. On the contrary, the new science of our time is recognizing the profound unity underlying the apparent diversity in parallel with the insights of wisdom and mystical philosophy.

Can we imagine all the potential unfolded for value education!

Negative reprimanding will only nurture negative tendencies and actions, while helping the child realize by himself what he is doing towards a positive transformation will foster good tendencies and deeds. The attitude of the adult –teacher or parent- is fundamental: instead of negative punishment, a loving guidance to make the child operate a shift within himself in positive terms.

“The mind is a remarkable entity.

When it is filled with wisdom, it makes man a saint.

When it is associated with ignorance, it turns him into an agent of death.

The mind is the cause of human bondage or liberation.”

Sathya Sai Baba.

Education in human values means education in spiritual values.

Nonetheless, we should be aware of **the crucial distinction between the outer/ organized religions**, with their systems of beliefs, dogmas and rules (to believe in and to be imposed), **and true inner spirituality**, as shown by the traditions of mystical philosophy and wisdom, strikingly akin to quantum physics/ new science.

It is this kind of lay spirituality, which is the deepest reality within, that constitutes the very core of the fundamental and universal human values.

Jesus said it quite clearly: the Kingdom of Heaven lies within you,
Like Socrates and Greek philosophy, giving the same teaching: Know Yourself.
At the same time, Buddha requested his followers to experience by themselves,
In coherence with the key assertion of Vedanta in India: the Atman –our Self- is the Brahman –the Absolute-. Sufis, too, have shown that the genuine path towards Allah lies inside us, like the Cabbala in Judaism.

*** I. Therefore, education in human values must incorporate the paths and instruments of inner work** (always with genuine teachers) from **the major spiritual traditions** of India and Buddhist Asia, Europe and the West, etc, and also from the modern findings of new science:

- Relaxation/ concentration/ visualization,
- Sophrology/ mindfulness/ focusing, etc,
- Meditation –among other forms, Meditation in the Light-,
- Different kinds of yoga, katsugen undo, etc;
- without forgetting introspection/ self-inquiry in relation and Socratic dialogue.

*** II.** In addition, we also require **the direct teaching of human values in the classroom**, both through topics and a comparative survey of spiritual traditions, always in a Socratic spirit and through intercultural dialogue with respect for all religions, underlining the common values to the different traditions in a vision of brotherhood and unity.

***III. The arts/ humanities can also be profound instruments of value education.**

*** IV. Human values should also be incorporated in the academic subjects through a value-centred Socratic pedagogy**, which sets forth and exemplifies on a normal basis the fundamental human values, high ideals and positive attitudes.

*** V.** Finally, **human values should be imbibing the whole life of the school**. As Sathya Sai Baba has pointed out, it is very important to create a certain ethos or atmosphere in the school based upon the twin pillars of love and discipline together with the silent presence of values everywhere.

In conclusion, value education should not recreate a new kind of catechism, but foster a real transformation of the human being; here, self-inquiry and dialogue become essential in order to observe ourselves and transform our own reality.

I.

The teaching of human values at the intellectual level is necessary in order to understand human condition and the process of transformation of the human being – which means, to tackle the crucial issue of consciousness-.

Here, it is deeply educational to put the growing child or youth in touch with the treasures of wisdom and spirituality from the main traditions of mankind –both Eastern and Western- and from the greatest spiritual masters;

Also, to put him or her in touch with the beauty, the values, and the penetrating insights into human nature conveyed by the highest literature and philosophy –Shakespeare, Cervantes, Goethe or Victor Hugo, to quote only some of the most august names of European civilization, after the grand legacy of Greece and Rome, together with Emerson, Kalidasa, R. Tagore, Rumi or Lao Tzu-.

The pedagogic function of spiritual or classical literature –in an intercultural perspective- is two-fold:

- Understanding –the human process and our own process towards realization-;
- And feeding the mind and the whole being with the positive influence and high vibration of this lofty culture.

That is why a direct teaching of human values is totally needed –in a Socratic way, and through a sensible presentation of the jewels of the spiritual and cultural traditions of mankind, always in an intercultural spirit of brotherhood and unity-.

II.

Then, we can bring students **from the mind towards the inner spiritual being** (“atman” in Sanskrit), so that they put into practice **a genuine process of inner work and spiritual transformation** in a Socratic spirit of self-inquiry through dialogue, through the observation of themselves towards their own self-realization.

In this subtle yet decisive domain, **spiritual education must combine the two pillars of humanity and reality:**

- Consciousness (from the common superficial mind to higher states),
- and energy (the energetic structure and dynamism in us).

From this point of view, **the Indian tradition speaks of the Supreme as being both:**

- Shiva/ Cit/ Purusha –the Consciousness-
- and Shakti/ Citi/ Prakriti –the Energy-.

The inner path is the only door that opens towards the metaphysical dimension of Reality (all the levels of our being beyond the body and other worlds in the Multi-verse). In our Sadhana –spiritual or inner path-, we must work at the level of consciousness – understanding, realizing, becoming aware of, in relation and dialogue with others-, and the level of energy –implementing some concrete practice that helps us to unblock and put in motion the energy towards our transformation-.

- Without consciousness, energy is blind;
- Without energy, consciousness is inactive.

To sum up: **the spiritual/ inner dimension of education should incorporate three complementary levels:**

- **Socratic self-knowledge**, which implies the nature of consciousness: who we are –in depth-, with our genuine inclinations, talents and vocation, all our potential, our inherent divinity, and this unique character of every human being –Sva-dharma in Sanskrit-; free self-inquiry –in relation and dialogue- also unfolds the universal human values that lie within each one of us.
- **Cleansing** –“**catharsis**” in Greek-, that is, the observation of the mental/ emotional blocks, prejudice and limitation in us, preventing the potential human values and unconditional love to manifest, and, instead, bringing us towards selfishness, conflict and suffering. Cleansing is usually not pleasant to the ego, but there is no real process of transformation without it. In fact, the ego often searches for satisfying spiritual experiences while it evades the more mature and indispensable stage of cleansing – which must be tackled in positive terms-.
- The knowledge -and even the experience- of **our energetic reality, this energetic structure and dynamism** that is now better understood through quantum physics, and even officially and scientifically accepted with the recognition of therapies such as sophrology, acupuncture, katsugen undo, reiki, etc –and needless to say, yoga-. This third level discloses a fascinating scope for harmonization, self-healing and education for health –in depth, from an integral perspective that cannot be denied anymore-.

Among **the instruments and paths for inner work** that are available, it is fundamental to stress the importance of **meditation**,

Knowing that there is a crucial distinction between:

- the practice of meditation,
- and the state of meditation.

Some persons easily reach deep states of meditation without virtually any practice, while others perform some kind of practice for many years and never reach a true state of meditation. Of course, this depends on the background of everybody.

In general terms, the practice will ultimately lead to the state; but we should learn the big lesson of patience and overcome all the cunning tricks of the ego.

Furthermore, we should not forget that the essential thing is not the practice, the technique, but the goal, the final state -that may sometimes come out naturally-.

In this process, human beings can live two kinds of experience, both being vital to the process of transformation:

- **Peak experiences** of higher states of consciousness: pleasant for the ego, and often enrapturing, overwhelming and more intoxicating than any drug, produced by the opening of higher Chakras or the awakening of the powerful process called Kundalini by the Indian schools of Yoga, prompting the connection with higher planes and other supra-empirical capacities.
- Secondly, more unpleasant for the ego but totally needed: the phases of **cleansing** or **“catharsis”**, when our blocks and limitations are wiped away –which means that we must pass through them in order to transcend them-.

The phase of cleansing is linked to what the ego dislikes most and tries to avoid: the obstacles and challenges in the process of transformation –sometimes unpleasant but still fundamental, because there is no other way to get rid of our own blocks; without this “catharsis” we would not really move forward.

In this horizon, the observation and understanding of oneself is crucial, together with the dialogue with others. Dialogue is inseparable from self-inquiry, since the I is inseparable from the You; only through dialogue the I may become We. Dialogue with others brings out our own limitations by confronting ourselves with the limitations of others. Consciousness is primary.

An earnest process of transformation must be capable of tackling these issues; without them, the ego escapes from the real path through spiritual divertimentos.

Through the process of transformation, the peak experiences will settle down, will become more stable, and will lead us towards the final constitution of higher states of consciousness, here and now, while rooted in this world;

which means that the transformation of consciousness, and therefore vibration, will affect even the physical body, unfolding a total transformation of Man.

This corresponds to the Indian concept of Jivan Mukta, which, in fullness and depth, has been beautifully explained by the great sage of Pondicherry, Sri Aurobindo.

Among the techniques of meditation, it is worthwhile to make the distinction between **four kinds of practice**, all of them implemented and tested by the main spiritual traditions of mankind:

- Meditation by focusing the mind on some concrete mental object, called in the Indian tradition Saguna Meditation; the concrete object can be a special visualization, a symbol, an Ishta-Devata –a deity selected by us-, etc.
- Meditation by concentrating the mind on some abstract mental object, called in India Nirguna Meditation, and especially developed by the grand tradition of Vedanta; here, the abstract object can be music, a mantra, an idea, or preferably, the Light –the first emanation of the primordial Consciousness, present in everyone and everything-.
- Besides, the mind can be centred on our own body, either the breathing or a specific part of the body, in particular a chakra –an energetic centre, between the eyebrows, at the side of the heart, on the abdomen, etc-.
- Free meditation without focusing the mind on anything.
- Here, in the fourth domain, we have the Theravada practice of Vipassana, just allowing the awareness to observe what happens outside and inside, at the physical and mental levels, without intervening, just watching or contemplating.
- Finally, we have the most difficult kind of meditation for common people, when the mind totally stops thinking and really enters another realm beyond thought. This is the purpose of the Japanese katsugen undo, which precisely intends to stop thinking, avoiding any interference from the mind, and allowing the deepest state of consciousness and the deepest movement of the body to naturally emerge.

Sathya Sai Baba has always recommended **Meditation in the Light** for children, easy to practise, innocuous, and immediately beneficial for the growing child.

When dealing with the growing child, we must select paths of meditation that are simple and appropriate to the age.

Furthermore, it is highly educational to utilize poetry, wisdom quotes, beautiful music, fine arts, etc. All these can be wonderful tools to bring the child inside and lift him or her to higher states. They can also be deeply therapeutic to cleanse inner blocks and get a better knowledge of oneself. All this has been practised in many places with very positive results; any school can find lots of materials and ideas from a diversity of sources all around the world.

In order to help people understand what happens within and follow the path ahead, **many genuine masters have described:**

- the obstacles in meditation –of a physical or psychological nature-,
- the experiences arising during the process,
- and the practical and technical aspects of meditation.

In the process of transformation, spiritual masters also request the disciple to surrender to them –not to their ego, but to that more profound reality that lies in both and is One-. Only through a total surrender to something superior, can the ego bend its rigid head and purify itself. This is the essence of surrender; the modern world has here a lot to learn from spiritual traditions, and has certainly to revise some profound misunderstanding. Spirituality unfolds purity and unity, and this requires the surrender of the ego –with its selfishness and tendency towards conflict-.

In this spiritual path, the key lies in consciousness –inseparable from energy-, which implies: understanding, acceptance, surrender, discrimination, unconditional love, compassion, wisdom, etc.

Section II.

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**Integral value education towards the transformation of
humanity and a new paradigm.**

I. Introduction/ terminology.

The terms “**holistic**” or “**integral education**” often refer to the more humanistic and global type of pedagogy. Many times, they also imply the spiritual dimension of humanity –not in terms of outer/ orthodox religions but rather in terms of inner mystical spirituality-. Although proper holistic education cannot overlook the most profound domain of the human being, some pedagogies have been defined as integral even if they do not manifest the inner dimension clearly enough. Hence, holistic education has been confused with other labels like **alternative education**.

Here, we use the two adjectives –integral and holistic- as synonyms –which is quite conventional-. At the same time, we underline that integral or holistic education strictu sensu encompasses all the domains of humanity -all of them-, for which the spiritual –inner- realm becomes intrinsic to any genuine integral pedagogy.

There is another connection that must be clarified: **the link between integral/ holistic education and education in human values or value-based education**. We must be aware that value education can be understood and implemented in different ways, some corresponding to the most traditional patterns of schooling in the modern age, and some directly connected with proper integral education.

- If values are comprehended in strictly intellectual/ emotional terms within the standard human psyche, it is reasonable that they are simply taught as any academic subject. This notion of values is external to the subject –it is a social construct-; and commonly it is inculcated or even imposed from outside through a system of beliefs that will usually correspond to some religious creed or organization or to some other ideological system in society.
- Values as mentioned in India by Swami Vivekananda or Sri Sathya Sai Baba are something entirely different, and they are directly connected with integral or holistic education. From Philosophical Idealism or mystical philosophy, values are not to be inculcated or imposed from outside by any system of beliefs through some kind of catechism that will operate at the intellectual/ emotional level. From the point of view of integral education on spiritual grounds, values naturally unfold from within, from the depth of human consciousness, and only then, they are real and they have an ontological texture. Therefore, they are also universal –in spite of the relative cultural formulation-, which is clearly exemplified by values such as love, peace or compassion, which are mentioned by sages from all spiritual traditions and cultures.

Otherwise, merely intellectual constructs implanted from outside do not really work, and as we all know very well, human beings educated in these traditional patterns show a striking and structural incoherence, since they systematically do the opposite of what they preach. We have seen too much of this kind of hypocrisy through human history. Only true integral education unfolding the ontological nature of values from inside can bring a real transformation of humanity and hence the world.

Some scholars have also underlined **the connection between integral education and systemic theory**. According to this kind of sociological/ anthropological thinking, the properties of any given system cannot be explained by the mere sum of its component parts. Instead, the system as a whole determines how its parts behave. Systemic/ holistic theories have overcome the limitations inherent to the mechanistic ideology predominant in the modern world, while integrating multiple layers of reality or experience within a global overview.

II. A brief historical mapping.

Scholars have found it difficult **to map the history of integral education and identify the key historical contributors** since the core ideas of holistic education are as old as mankind and may be traced back to virtually all cultures of human history. Only modernity has imposed another world view radically cut from these core ideas -timeless and universal-. Still, some major figures and schools of thought can be easily identified, among which we would stress Vedanta, Buddhist philosophy and Plato/ Neoplatonism in the ancient world, and Kant, Hegel and Rousseau/ Romanticism at the dawn of the modern age.

Together with Rousseau, the names of Pestalozzi and Froebel should be added. Among the Romantics, several authors manifested a keen interest in education –on holistic grounds-: Goethe, Schiller, Novalis, Jean-Paul, Emerson, Thoreau, Alcott, etc. In the XXth century, we should especially mention the heirs of Theosophy, R. Steiner and M. Montessori, together with the founders of American Pragmatism like J. Dewey and F. Parker, as well as the renowned father of Jungian psychology, Carl Jung. More recently, we could point out some reputed names like H. Gardner, D. Goleman, K. Wilber, A. Maslow, C. Rogers, etc. In the last decades, transpersonal psychology has brought a substantial contribution to integral education.

Needless to say, **Western scholarship usually ignores the bestowal from other civilizations, in particular India**, where integral education comes back to the Vedic period, while modern India has provided the most profound formulations for this kind of pedagogy with great sages and philosophers like Swami Vivekananda, R. Tagore, Swami Yogananda, Sri Aurobindo, Shivananda, J. Krishnamurti, Sri Prabhupada, Sri Sathya Sai Baba, etc. In no other country in the world are there as many schools of holistic education as in India. But, as Prof. R. Panikkar always reminded, the inertia of cultural imperialism still undermines the capacity of aperture of the West to a real intercultural dialogue.

III. Main features of integral education.

1. In spite of historical, cultural or personal differences, **integral education presents a set of core characteristics**. To start with, **the main goal of education** would not be academic training but the formation of character, the education of the human being as such, and hence, the transformation of humanity towards higher states of consciousness above the still prevailing selfishness, egoism, unlimited desire, division, conflict, violence, domination, etc. Holistic education aims at helping the growing child or youth to become what he or she is already in potential terms. One of the major figures of transpersonal psychology, **A. Maslow**, refers to it as “**self-actualization**” –or **self-realization** in the more traditional vocabulary of spiritual traditions-.

2. The holistic perspective is concerned with **human realization at all levels:** physical, relational, ethical, emotional, intellectual, aesthetic and spiritual. Whatever is the concrete way of structuring and unfolding all the domains of human personality, integral education always engages students in an active role through their own learning process, which means that holistic pedagogies promote **the self-education of the child**. This kind of education also fosters positive values and attitudes, maturity and responsibility, together with community life and the sense of brotherhood and unity. Holistic pedagogies help the growing child overcome obstacles and difficulties and face challenges.
3. Nevertheless, **integral education is not confined to positive values and community life** –as in mere scouting for instance-; it goes far beyond since **it unveils all the depth of the human being**.

At a strictly psychological level, integral education tries that each child strives to become all that he or she can be. Hence, there would not be deficits or disabilities according to pre-established standards, but rather differences in psychological tendencies and multiple intelligences.

Sill, human realization would not be limited to psychological criteria, since the inner spiritual dimension would constitute the last and most profound layer of any genuine integral pedagogy. As we warned above, this is not the realm of outer organized religions, but rather the very breath of the Spirit within, the depth of human consciousness. From this spiritual/ mystical depth, integral education emphasizes the coherence between thought, word and deed, that is, the harmony between the inner and the outer world. It also tries to develop in the child's mind the notions of interdependence and interconnectedness –so dear to the forerunners of quantum physics like Planck, Heisenberg, Bohr or Schroedinger-.

To sum up, integral education inherits the mystical insights and wisdom of the ancient traditions of Philosophical Idealism and spiritual philosophy, though it tries to adapt this millenary timeless heritage to the modern world. In Western civilization, Socrates would be the most paradigmatic figure while following the immortal inscription on the Temple of Delphos: -Man, know yourself, and you will know the universe and the gods.

4. **A holistic curriculum will be very different from the typical modern schooling** – which reduces education to pure academics, and hence, to professional training from the predominant mechanistic ideology of Industrial Revolution-. Holistic pedagogies do not neglect academic training, although they will shift from the mechanic ways of academic teaching –quantity of information to be memorized and poured down in tests- towards true academic excellence lying in free creative thinking, imagination, inquiry and self-expression.

5. Beyond academic excellence, integral education will bring children to know about themselves. Holistic education is essentially Socratic –Know yourself- which is also at the core of the Indian Upanishads. Moreover, integral education knows that self-knowledge is essentially relational, since the human being is essentially social. Therefore, integral education will educate children through **relationship and Socratic dialogue**, something that the modern sage, J. Krishnamurti, expounded with sharp lucid insights.

6. Integral education will attach great importance to **the teaching strategies, pedagogic tools and educational methods**, convinced that the mainstream school system has impoverished pedagogy by overstressing the academic lecture method and bringing it from top down, from college down to primary school. Holistic education will certainly favour a more Socratic/ dialectical method of teaching, while it will promote a more active role of the student. Furthermore, integral education is by definition child-centred and value-based: it seeks to unveil the uniqueness of every child or human being, instead of moulding the growing human being into fixed and rigid social patterns; it also seeks to unfold the fundamental human values –such as love, peace and compassion- from within. This means that there should not be any dualism in education; values and academics are inseparable. The whole educational process and campus must be imbibed with values and a certain ethos.

7. Ultimately, **integral education is essentially transformative rather than informative**. As Albert Einstein warned, modern science and technology are like an axe in the hands of a pathological criminal –the ordinary mind, valueless, selfish and destructive-. For holistic pedagogies, the most fundamental goal of the educational process would be the transformation of the human being towards higher states of consciousness and vibration.

8. On the other hand, **integral education emphasizes relations and dialogue, interdependence and interconnectedness**, whereas mainstream schooling has operated a brutal fragmentation of knowledge and reality. This means that holistic pedagogies will favour interdisciplinary approaches and team work –without dismissing personal effort-. Just like systemic thinking in social studies and quantum physics in science, holistic education recognizes the various facets of reality as connected and integrated. Together with this transdisciplinary spirit of inquiry, integral education recognizes the dialectical nature of the cosmos, life and humanity.

9. **As per the evaluation methods, holistic pedagogies will avoid the mechanical tests so well developed in mainstream schooling** –till the most aberrant formulations in Asian countries like India, where students are forced to memorize without understanding in order to pour down this blind quantity of information in disciplinary tests-. Integral education prefers another kind of academic excellence based on conceptual exams, essays and commentaries, problem solving/ case study, experiential methods, etc, while it fully elaborates all the possible tools to encourage the spirit of inquiry and creativity of the student. The concept of the project becomes a major evaluation method in holistic schools.
10. **The teachers' role** faces another major mutation from mainstream schooling to integral pedagogies. In the typically modern school, the teacher is regarded as a figure of authority who controls and punishes –just like the state-. Integral education comes back to **the profound spirit of the master/ disciple relationship** –the Gurukula of India or the Greek Paideia-. This means that the teacher is seen as a friend or mentor who accompanies the growing human being from love and respect for the unique nature of the child. Consequently, integral education will prefer dialogue to monologue, cooperation to competition.

In conclusion, integral education in the modern age culminates the historical drift towards human realization evolving through all cultures of mankind with new developments and achievements. Contemporary holistic education constitutes the humanism of our time, the actualization of millenary traditions of philosophy and wisdom at the dawn of a paradigm shift.

IV. Integral education and the paradigm shift. **To bring back that Glory to the Earth.**

At the deepest level of the integral and multi-dimensional nature of humanity lies an inner reality that is inseparable from the very breath of Life, a state of Peace beyond any mental discourse on peace, an infinite Joy beyond the duality of happiness and sadness of common emotions, an unconditional and stirring Love beyond any possessive or egoistic feeling in the ordinary emotional mind, the Light of lights that is One with all fellow beings and the Cosmos entire. In that depth inside, the most profound and universal human values are a living reality, and from that depth inside the human being becomes truly human and divine.

Although unfathomable, these **higher states of consciousness** have been beautifully depicted by the greatest poets, both from the East and the West. In modern Europe, Romanticism has revealed the most profound nature of Man and Cosmos in front of a rising mechanistic world that was unable to understand it and unwilling to listen to it.

After the horrors of the French Revolution, that, instead of nurturing a new mankind repeated the tyranny of the past, the Romantic poet could chant a truly new vision that was the real awakening to a higher level of reality:

“I was only then
Contended, when with bliss ineffable
I felt the sentiment of Being spread
O’er all that moves and all that seemeth still;
For in all things
I saw one life, and felt that it was joy.”

William Wordsworth, “The Prelude” (version of 1805- 1806).

To accompany the child and youth along this ladder towards higher states of consciousness would be the true meaning of education and the only path of future for mankind. Anything else can be training or instruction, but not education –“**educare**” in Latin, that is, “**e-ducere**”, to unfold from within the innermost nature of humanity; “**bala vikas**” in Sanskrit, literally meaning the blossoming of the boy/ child from within-.

“A school should not be considered to be just a commonplace arrangement designed for teaching and learning. It is the place where the consciousness is aroused and illumined, purified and strengthened.”

Sathya Sai Baba.

The atrocities, horrors and crimes against mankind during the IIIrd Reich, and in particular in the extermination camps, were perpetrated by men -and women too- with college/ university degrees and even Ph.D. After more than 60 years, European/ Western education has still not changed –in general terms-; it is still merely academic.

But all that academic knowledge would be for what? For exploiting our fellow human beings and devastating the whole planet? - As many managers with MBAs are doing from the big corporations that ravage the Amazonia, or as many petty business men with “culture” are doing from the smallest workshops where young children work as slaves-.

Mankind has still not learnt the lesson of 1945, and history continues to repeat itself, with an acceleration that is characteristic of our time. The Europeans who illusively thought that 1945 was finished, had to witness the horrors of Stalinism, Maoism, the Red Khmers, the dictatorships of Latin America, Vietnam, etc, –until the horrors happened again even on the soil of Europe in Yugoslavia-.

1945 will only be closed through a shift in the state of consciousness, and this should constitute the main goal of education.

Meanwhile, many among the “best” private schools of the world, also the most expensive, still advertise their pedagogy without mentioning not only the spiritual dimension – of course- but even human values; it is only a matter of training skilled professionals capable of taking afterwards the best paid jobs –which compensates the investment done by their parents-. In parallel with that, the Authorities of the European Union want to cancel philosophy of education as a subject in the career of education, being replaced by pedagogic technologies.

Many people are still blind with the technological mirage of our time. Faced with acute problems, human authorities on the Earth think that they will find the solutions with more technology; while it is the technology –or science, or knowledge- without values, without a holistic sensitiveness, that has produced the present catastrophe, evident enough at the ecological level. We will not arrange anything with more technology; the system by itself is unsustainable. Only with values, only with a holistic outlook, only with a shift of paradigm, may we have some future ahead. As Albert Einstein said, we can never solve a problem with the same state of mind that has created it.

The emergence of a new science, with fields like quantum physics, relational theory, epigenetics, deep ecology, Jungian psychiatry, transpersonal psychology, sophrology, etc, implies a lucid acceptance and even understanding that the human being is multi-dimensional, like the universe; not only are there different states of consciousness but even different levels of vibration and reality, and a multiplicity of parallel universes.

In this quantum horizon, the time has come to dare to speak, and not to feel any shame or to hide oneself behind subterfuges. The time has come to dare to speak of the spiritual/ mystical dimension of humanity, and –of course- of God. But not that distant and terrifying God that lies there in Heaven very far from us, and judges and condemns; since, as Lord Jesus uttered, the Kingdom of Heaven lies within us. Here we speak of the Brahman that is the Atman -the very essence of ourselves-. We speak of the God of love and compassion chanted by the greatest saints and sages of the West and the East, like Saint Francis of Assisi, Kabir, or Swami Yogananda.

What we defend is finally a matter of common sense: to integrate all the dimensions of humanity for the sake of children and all human beings; to come back to the true, original – etymological- meaning of education –“e-ducere”, “bala vikas”-.

Which means, to raise the fundamental issue of the transformation of the human being – from within-: the real, ontological transformation of humanity towards higher states of consciousness and vibration THROUGH EDUCATION.

Only that can assure us that the IIIrd Reich will never happen again. Only that can open a path of future for mankind –at the historical point where self-destruction is not only possible but more than probable-. To deny it through the XXIst century would be to deny reality, and finally, a suicide.

This transformation can only occur in total freedom, through a genuine pursuit, research and inquiry. Transformation cannot be imposed –only outer systems of beliefs and catechism can be imposed from outside-. We can only transform ourselves; of course, with the caring and affectionate guidance of a true teacher, who will never impose but only suggest, who will at the maximum show the path that will have to be trodden by ourselves, since the true master is the one who wants the pupil to become his own master. As Lord Buddha would say: - Do not believe me; just listen to me.

Truth cannot be imposed from outside as a concept. It can only be experienced from inside as a reality. There is no other reality than Life itself, and we can only live our lives ourselves. In this shining horizon of love and realization, education becomes a caring guidance, when the teacher is a true “guru” –friend, philosopher and guide-.

The tragedy of Romanticism arose from a lucid awareness of the sinister destiny of the modern world, begetting all the horrors that humanity has witnessed from the Terror of the French Revolution until the crimes against mankind in the recent civil war in the former Yugoslavia. The Romantics understood in depth the process of modernization, since their comprehension dawned from deeper layers of human consciousness. In this tragedy, the Romantic hero realized with grief and nostalgia that the Light of a higher reality was vanishing in a joyless dismal world increasingly dominated by the lowest tendencies of the most superficial ego.

“Our birth is but a sleep and a forgetting:
The Soul that rises with us, our Life’s Star,
Hath had elsewhere its setting,
And cometh from afar.”

“Turn wheresoe’er I may,
By night or day,
The things which I have seen I now can see no more.
Yet I know, where’er I go,
That there hath past away a glory from the earth.”

William Wordsworth, “Ode. Intimations of Immortality from Recollections of Early Childhood”.

The Romantic hero feels that there hath past away a glory from the earth.

We do believe that integral education in human values can bring back that glory to the earth.

Integral education in brief.

The flaws of mainstream schooling:

- Nurturing a valueless society
- The robotic pedagogy still prevailing in Asia
- Scientism/ technocracy prevailing in the West
- Most graduates unprepared for real life
- School failure inherent to the system
- Behavioural/ psychological troubles (especially boys)
- Crisis of boys' education: boys left behind
- The different pedagogic needs of boys and girls not acknowledged
- Individual needs also neglected

QUALITY versus QUANTITY.

➤ Mainstream drift:

- quantity of information
- rote learning
- obsession for tests
- evaluation becomes an end not a means
- proper education discarded by exams

➤ True education:

- quality not quantity
- free/ creative thinking
- learn how to learn
- self-learning
- self-knowledge
- creative assessment
- holistic evaluation

The modern school factory has consisted of imposing, reprimanding, punishing, standardizing and controlling –through teacher's monologue and the school system-.

Integral education is humanistic since it is based upon empathy and love. Without love and empathy towards the student discipline becomes repression. From love and empathy discipline becomes education.

Instead of reprimanding and punishing, a genuine teacher tries to understand the child, not only his achievements but also his problems. Only through love and dialogue, empathy and understanding, can the adult help the growing child to positively transform himself or herself, and ultimately know himself and realize his/ her own potential. (Socratic dialogue.)

Then the school is not mere intellectual/ professional training but the education of the human being as such -in its innermost humanity and conscience-.

ACTIVE versus PASSIVE.

➤ Active learning:

- research
- creative
- exploration
- (qualified) freedom
- responsibility
- relation/ dialogue
- self-realization

➤ Passive learning:

- memorizing
- mechanical
- imposition
- (rigid) discipline
- selfishness
- teacher monologue
- alienation

The modern school factory: children must fit into an external, rigid frame that constitutes in fact an imposition upon their own evolving nature and inner inclinations. This external pattern is inherently technocratic; it is ultimately professional training of both white and blue collar workers in a materialistic civilization of workers/ consumers that standardizes and controls.

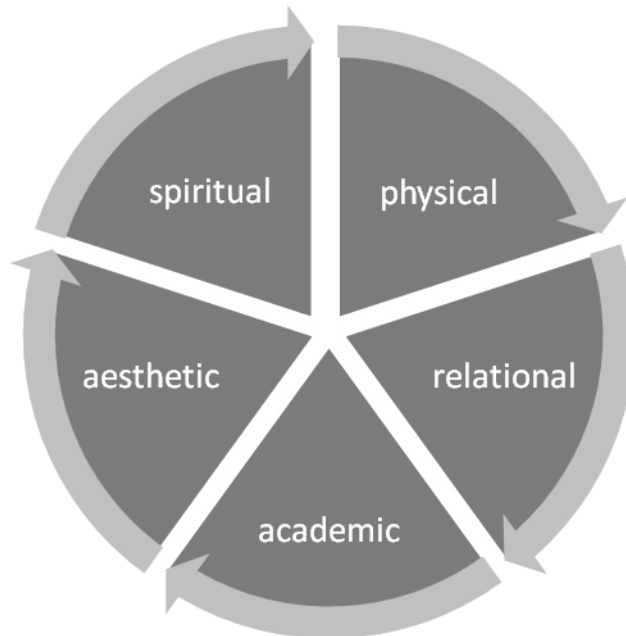
Modern schools mould the child. In holistic education children mould the school.

Integral education respects the uniqueness of every child/ youth and unfolds his/ her own talents and deeper vocation. A genuine teacher is a friend, philosopher and guide who accompanies the growing human being and helps him to manifest his deeper potential, know himself and realize his or her own nature at two levels:

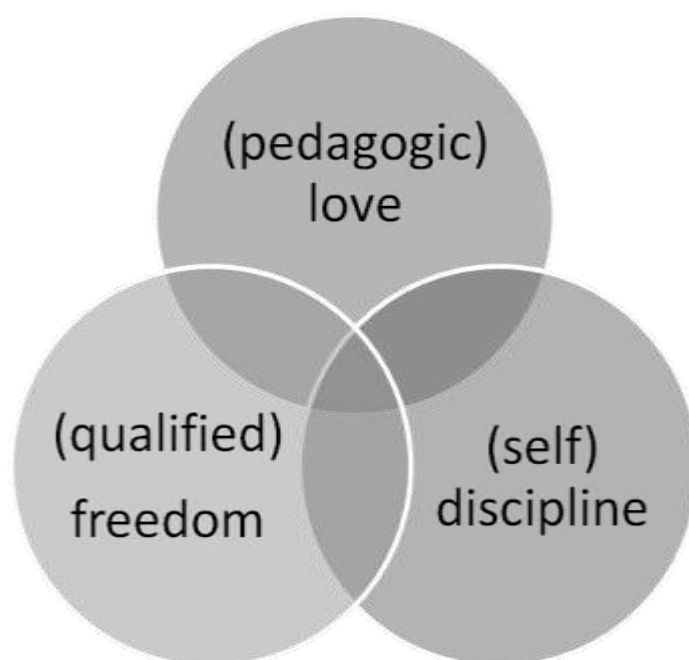
- **Experience-based self-learning at the cognitive level:** inquiry, research, learning how to learn with critical free thinking while awakening the child's own talents and vocation. (Cf Dewey.)
- **Socratic self-knowledge of the deeper self in spiritual terms;** not to fit into external rituals or dogmas but rather unveiling the inner dimension and deeper layers of consciousness. (From Plato to Ramana Maharshi.)

➤ **What is integral education?**

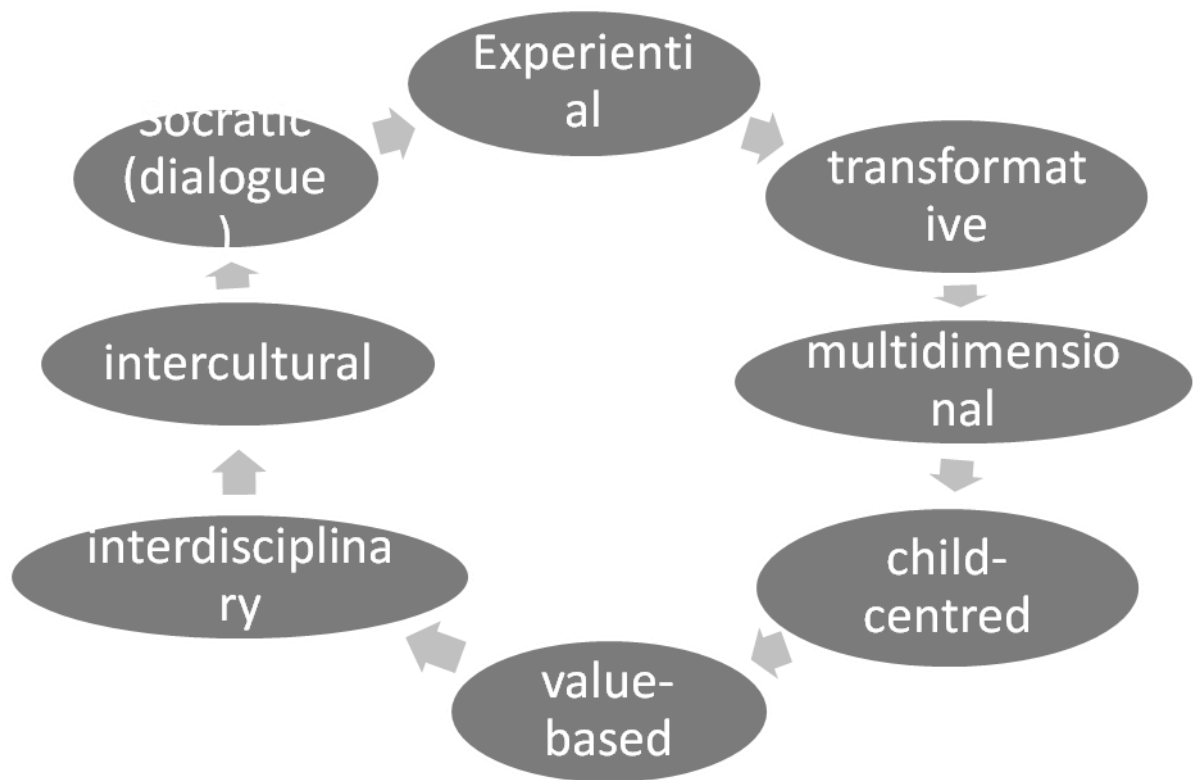
**The five domains of human development.
Transformation rather than information.**



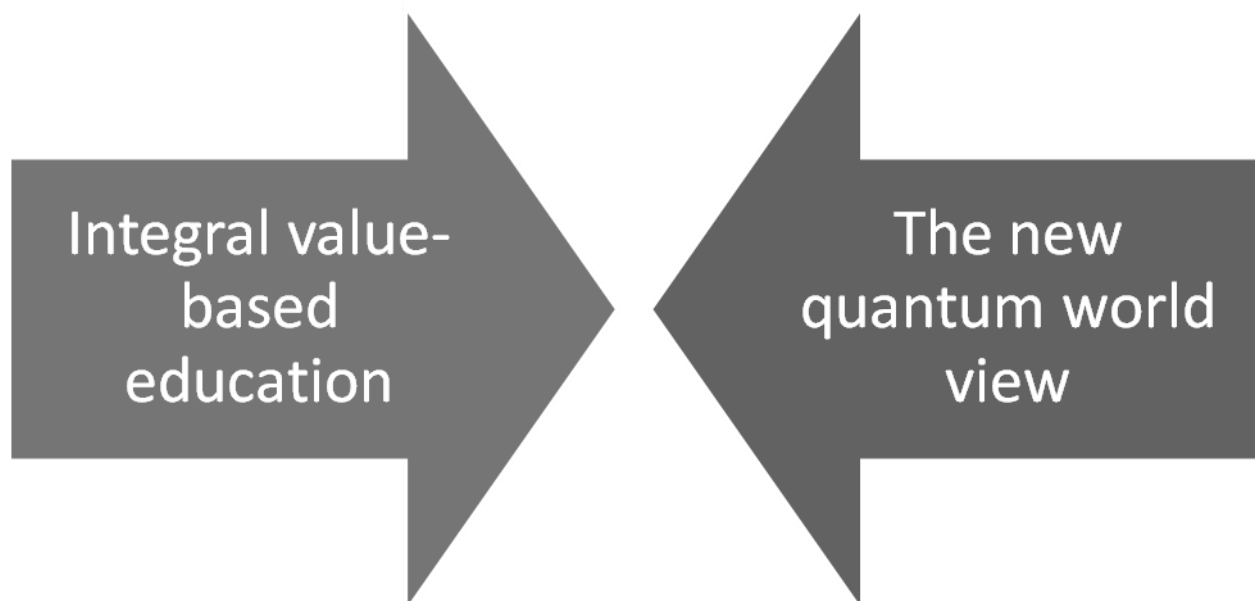
➤ **The three pillars of education.
Education as self-realization.**



Integral education should be:

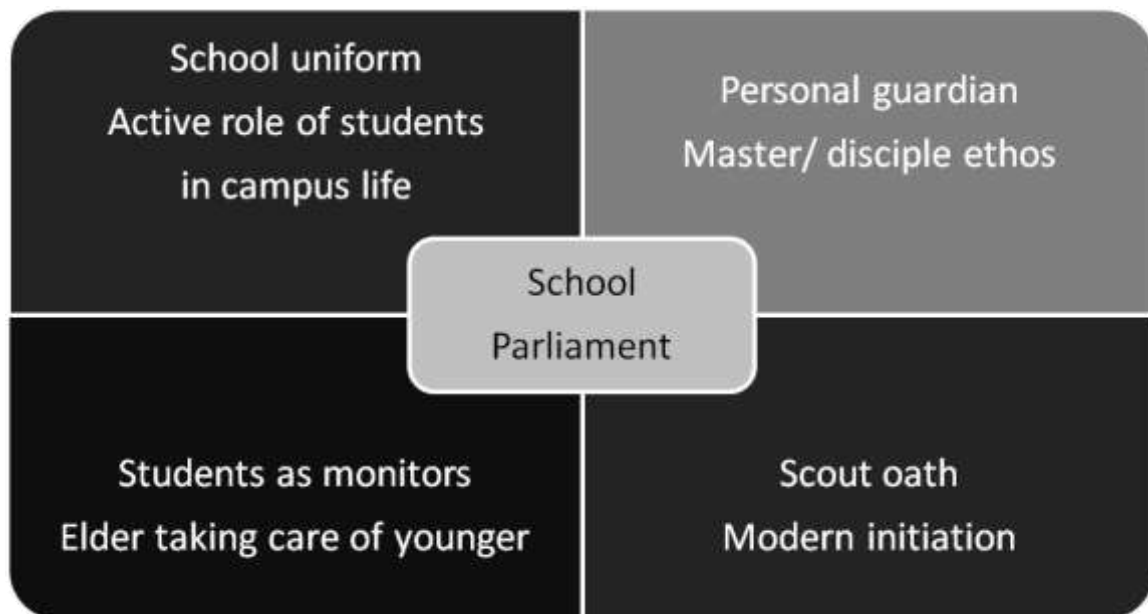
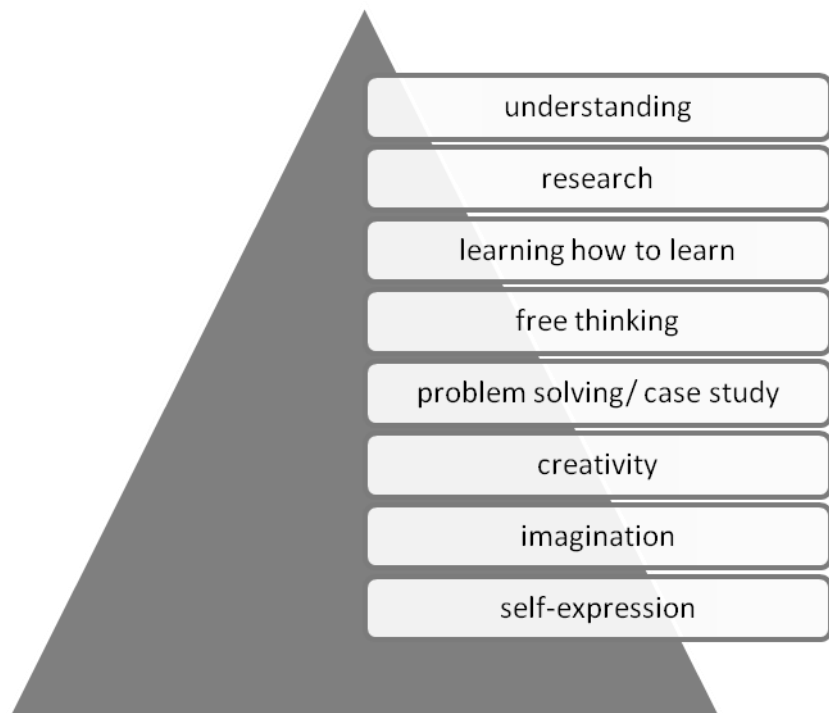


The new holistic paradigm.



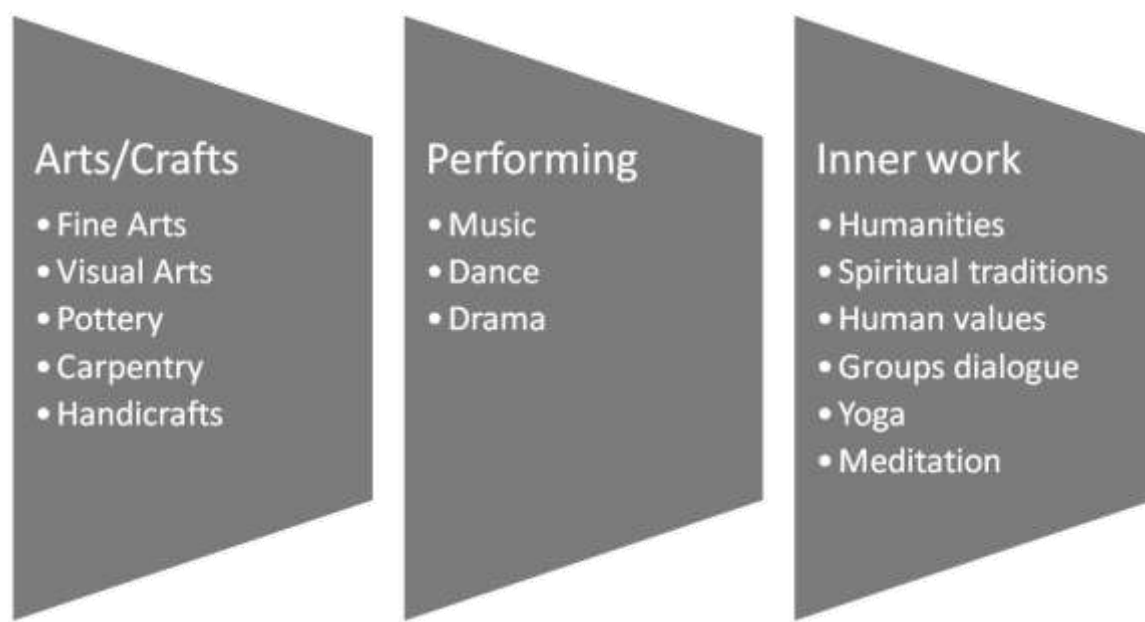
Academic excellence.

Conceptual education directed towards:

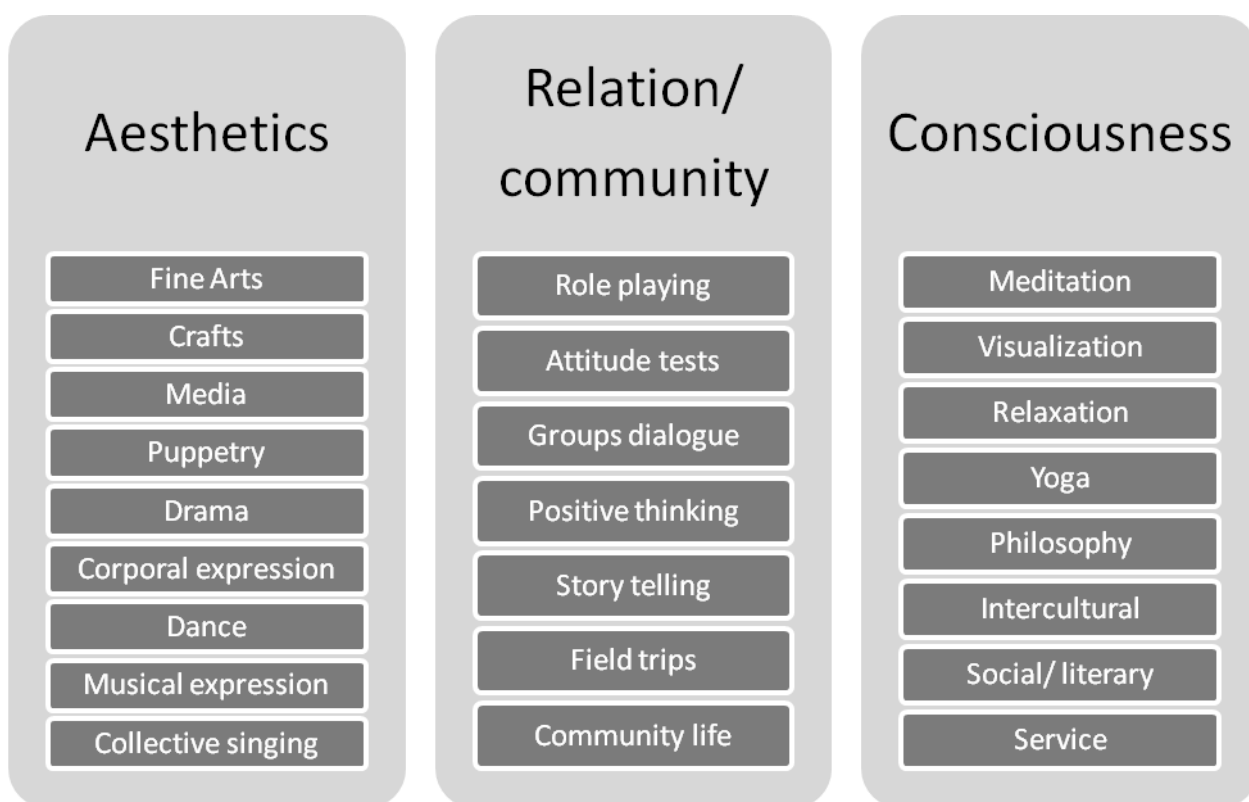


Community life.

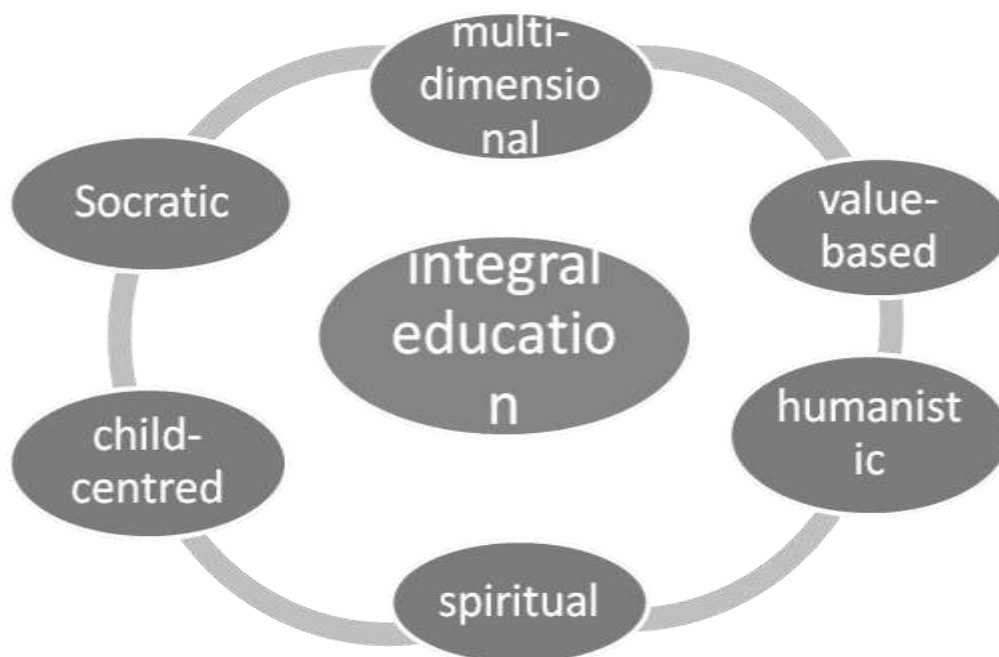
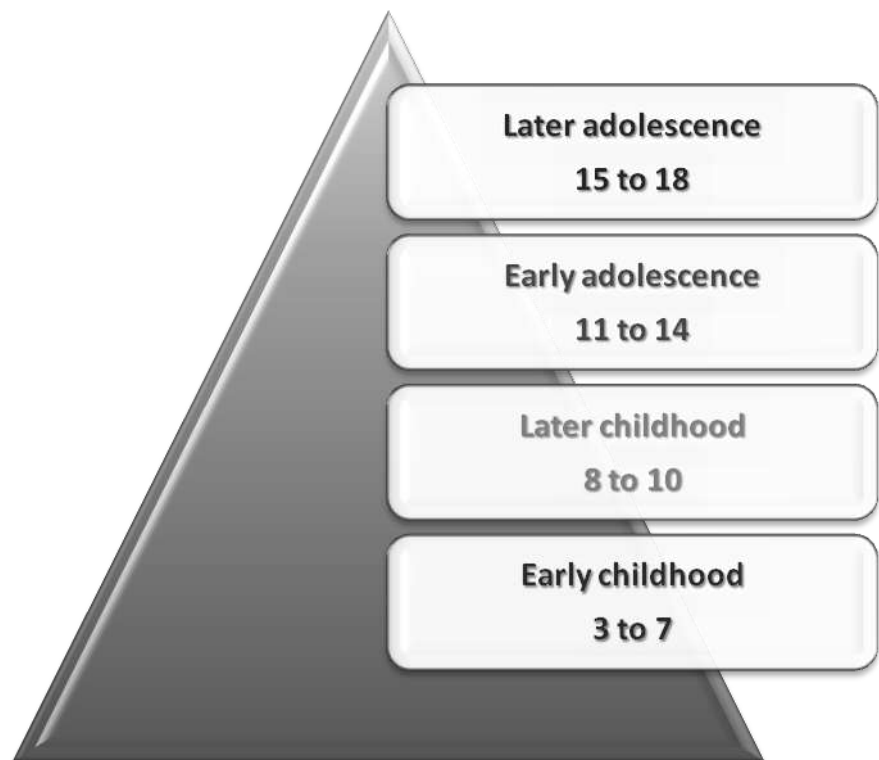
AFTERNOON WORKSHOPS for integral education.



Value-based education.



**Pedagogic process through age groups.
From Rousseau to Piaget and Steiner.**



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Section III.

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Some historical and philosophical reflections.

➤ **The 2013 PISA Report from the OECD**

evaluates a number of educational systems around the world. Apart from reading, the survey is focused on mathematics and science on quantitative/ mechanistic methods. In the first ranks we can only find Asian cities or countries. The PISA Report stands as a symbol of modern mainstream schooling, a pedagogic system that has fed all the evils of our world, and has no more future ahead if mankind must have any future of Earth.

- **For the renowned philosopher, R. Panikkar**, the PISA Report would be a clear example of the blind technocracy prevailing in the modern age at the antipodes of human realization. To start with, why are the first ranks taken by Asian countries or cities? Probably by forcing children to study from 4:00 or 5:00 AM till 10:00 or 11:00 PM –something that should be legally banned as standing against fundamental human rights-.
- **The Italian philosopher, N. Ordine**, could add that the PISA Report legitimates and perpetuates the utilitarianism, scientism and economicism that have discarded any form of humanities and humanism in the last decades, producing a dehumanized humanity that will not be sustainable on the long term.
- **The sage of French Renaissance, Michel de Montaigne**, already warned several centuries back that: “Science sans conscience n’est que ruine de l’ame.” (“Science without conscience is but the ruin of the soul”.)
- One of the greatest scientists of the XXth century, **Albert Einstein**, stated after 400 years of modern development that the present science and technology (the only things that the PISA Report takes into account) are like an axe in the hands of a pathological criminal.
- **Ch. Boukaram**, a contemporary scientist heir of quantum physics and epigenetics, reminds us that new science and spiritual philosophy are converging in depth at this point of human history.
Einstein understood that the physical world is but the manifestation of an immaterial world, which the French poet, **A. de Saint-Exupery**, beautifully expressed: “What is essential is invisible to the eyes”.
- **All the major figures of quantum physics** have concluded that the basis of the cosmos is not matter, even not energy, but consciousness –exactly what **Vedanta** anticipated in India thousands of years back-.
Therefore, the foundation of education cannot be the subjects that the PISA Report overstresses –maths and science- but the formation of consciousness, which means human values and ethics.

- **Recent research published by the University of Pennsylvania in the USA** shows that the pattern of neurological connections differs between the male and the female brain: the first has more connections within each brain hemisphere, while the second has more connections between the two hemispheres. In any case, it is undeniable that the brain connections are not finalized at birth but can be built through education.

The technocratic pedagogy of the PISA Report will never stimulate a balanced growth of neurological connections, especially between the two hemispheres, which requires special attention to be given to boys. Only a holistic value-based pedagogy can foster a balanced growth of neurological connections and a deeper integration between the two brain hemispheres, nurturing more harmonious, ethical and self-realized human beings.

- For how long the prevailing culture represented by the OECD will continue to deny the major contributions of both science and philosophy, and carry on a blind technocracy that can only bring humanity to a collapse sooner or later? -As V. Havel, President of Czechoslovakia, clearly warned before a joint session of the Congress of the USA in 1991-.
- One night the author of this Project had a dream, in which a well-known spiritual master asked him: Which is the core of all the spiritual and philosophical teachings of mankind? The author thought: God; but the Master replied: the human person. The school system should incorporate a sound proposal for the education of the human person -beyond the misery of modern mainstream schooling that has dramatically reduced all the depth of the pedagogic process to professional training of both white and blue-collar workers-.
- The two major teachings of **Jesus Christ** would probably be:
Love one another.
And: The Kingdom of Heaven lies within us.

Human beings will only love each other, will only engage themselves in true cooperation and solidarity, when they awaken the Kingdom of Heaven within, which constitutes the very core of integral education in human values, the education of the human person –beyond the technocratic professional training that has no other future ahead except an unstoppable collapse of civilization probably sooner than later-.

➤ **UNESCO. The Four Pillars of Learning.**

- **Learning to know:** to provide the cognitive tools to comprehend the world and its complexities, and to provide a foundation for future learning (life-long education).
- **Learning to do:** to provide the skills enabling individuals to effectively participate in the global economy and society.
- **Learning to be:** to provide self analytical and social skills enabling individuals to develop to their fullest potential psycho-socially, affectively as well as physically, towards an all-round complete personality.
- **Learning to live together:** to expose individuals to the values implicit within human rights, democratic principles and intercultural understanding, enabling individuals and societies to live in peace and harmony.

Do these Four Pillars reflect the integral nature of humanity and hence education? Obviously a Fifth Pillar is missing, which traverses the whole history of human thought from the Palaeolithic till today. How is it possible that UNESCO does not include the spiritual domain, which is present in ALL cultures of mankind, ALL without exception? We are not talking here of any specific tradition or credo, but that profound dimension of human consciousness that is apprehended by all cultures of human history.

➤ **UNESCO. The Report of the Faure Commission.**

Report by the International Commission on the Development of Education, presided over by Edgar Faure; UNESCO, 1971/72 (second edition 2013).

Although criticized for its visible limitations, the Report stresses in its own title the importance of “**Learning to Be**”, which incorporates the **ethical** and **emotional** aspects, but NOT the spiritual domain yet.

The Faure Commission and Report perpetuate the limitations inherent to most of the documents produced by UNESCO till the 1990s.

➤ **Peter Russell: from science to spirituality.** **Consciousness is the key.**

Peter Russell gained a degree in physics and experimental psychology at the University of Cambridge, and a postgraduate degree in computer science. Afterwards, he practised meditation and studied Eastern philosophy in India; from this deeper experience, he could conduct research into the neurophysiology of meditation at the University of Bristol.

Over the years, he has also been a consultant to American Express, Apple, Barclays Bank, BP, IBM, Nike, Shell, and other corporations.

Through his fascinating personal voyage, Russell's thought has operated a shift from materialism while studying mathematics and physics at Cambridge University to the awakening of the spiritual dimension in India. His work proposes a personal synthesis of science and spirituality, integrating physics, psychology and philosophy in the horizon of a new paradigm in which consciousness is fundamental and represents the very core of spirituality.

In his well-known book, “From Science to God”, Russell explores the nature of reality and the crucial issue of consciousness. His discovery of the spiritual domain from his previous scientific work as a physicist exemplifies the historical dialogue between quantum physics/ new science and the traditions of spiritual philosophy and wisdom present in all cultures of human history.

Could UNESCO continue to ignore these fundamental trends of our time and stick to the bias of a materialistic ideology that ignores the perceptions of all cultures of human history before the advent of the mechanistic worldview? May UNESCO realize that the Four Pillars of Learning do not constitute an integral pedagogy since they overlook the Fifth Pillar, the spiritual domain?

➤ **UNESCO. The Delors Commission and Report.**

International Commission on Education for the XXIst century, presided over by Jacques Delors; Report to UNESCO (1993/ 96).

Beyond the prevailing technocratic and utilitarian tendencies, this Report clearly defends a humanistic and idealistic kind of education as a truly holistic process, which comprises the aesthetic and very especially the spiritual domain neglected by previous international reports.

The title is meaningful enough: **“Learning. The Treasure WITHIN”**. The Report explicitly uses the term **“multidimensional education”**. In its own words, it proposes: “self-understanding through an inner voyage whose milestones are knowledge, meditation and the practice of self-criticism” –the very essence of the Socratic/ mystical path expounded by holistic pedagogies-.

This pioneering Report, acclaimed by a number of scholars all around the world, finally opens international fora such as UNESCO to the spiritual dimension and hence to genuine holistic education.

The work of scientists such as Peter Russell has certainly helped many to open their eyes and bring this new holistic paradigm merging science and spirituality into governmental or international instances such as UNESCO.

FROM MODERN SCHOOLING TOWARDS INTEGRAL EDUCATION: A NEW PARADIGM AND A NEW CONCEPT OF HUMANITY.

- Modern education has been focused on pure academics from a strictly intellectual/rationalistic approach; nothing about consciousness, nor about the human dimension of the student. In this context, the academic lecture method has been implemented from top (university) downwards till primary school, with battalions of children geometrically ranged with elbows on desks and eyes fixed on the blackboard for the whole day, with bells mechanically disciplining time like in a factory. We must dare to say that the modern school dismissed genuine education and was reduced to professional training – for both white and blue collar workers-; it had nothing to do with the education of the human person as such. The modern school was the pedagogy of Industrial Revolution in a materialistic society: an utilitarian pedagogy for a technocratic civilization. The Romantic reaction can help us to grasp the cultural ambience of the modern age and its educational system.
 - This typically modern school system was aberrant from a pedagogic and an anthropological point of view. It did not respect the child's nature and evolution, and it overlooked the very roots of education and the most important things of life –namely human consciousness and self-knowledge-. Hence, it would be radically questioned by the most eminent educationists from Romanticism onwards: Rousseau, Pestalozzi, Froebel, Steiner, Montessori, Piaget, Dewey, etc, who would open new avenues for a deeper, richer and more humanistic kind of pedagogy. Our educational project has been inspired by these eminent educationists of the Western world, without forgetting the foundation of European educational philosophy –Greece and Plato- in dialogue with Indian spirituality and pedagogy –after Vedanta and the classical Gurukula, Vivekananda, Tagore, Aurobindo, Krishnamurti, Sathya Sai Baba, etc-.
 - This intercultural dialogue East/ West applied to education opens the door to another dialogue between science and spirituality, between quantum physics/ new science and the traditions of spiritual philosophy and wisdom.
 - This double dialogue unfolds a new humanism and a new holistic paradigm for the future of mankind, and provides an epistemological foundation for integral education in human values. Holistic education is the pedagogy of this new emerging paradigm, just as the typically modern school was the pedagogy of Industrial Revolution, capitalistic expansion and colonization.
- Dewey already proposed the **Socratic dialogue** in front of the teacher's monologue inherent to mainstream schooling –pouring down information-.
 - Sri Aurobindo or Tagore would go much further: from the merely pedagogic level of Socratic dialogue –Dewey- to its full metaphysical depth –Plato-.

➤ From this new paradigm, our educational project would point out **several crucial points for the future of education:**

- The modern school system was not taking into account the specific characteristics of the different age groups, treating children like small adults, considering even the primary school as a junior college –based on lecture method-, and ultimately teaching all children in the same way regardless of the unique nature of every child and the multiplicity of geniuses and forms of intelligence in human life. As Foucault stressed, the modern school was devised to standardize and to control, while our educational project inherits the loftiest humanism from the West and the East, and aspires to academic and human excellence through the blossoming of the child from inside –Bala Vikas in Sanskrit/ E-ducere in Latin-.
- The modern school system reduced the holistic multidimensional nature of the human being to a rational mind with a body -and the cosmos to matter-. Today, there is sound scientific evidence to overcome this modern fallacy and reductionism. The universe is not a machine –as mechanistic physics postulated-. Quantum physics and new science have shattered the mechanism dominating modern culture, and have finally reached conclusions deeply coherent with those of spiritual philosophy and wisdom. From this historical convergence we can assert that both Man and the Cosmos are multidimensional in interdependence. This constitutes the basis for an integral kind of education.
- As we said above, modern schooling was based on the teacher’s monologue pouring down information on students to be later poured down in mechanistic tests. Mainstream schooling taught what to think, not how to think. Integral education teaches how to think in freedom through the Socratic dialogue: from Dewey to Aurobindo or Tagore towards self-knowledge and self-realization. Modern schooling was authoritarian and technocratic; integral education is democratic and humanistic.
- The modern school system was valueless since it was utilitarian and technocratic. This has produced a horde of immoral economic and political agents that have brought the Western world and the whole mankind to the present economic crisis - which is in fact a crisis of civilization-. Any serious reflection today acknowledges that the present model is unsustainable. Integral education is value-based. But this does not mean a new kind of catechism – we have had enough in the past-, since it goes far beyond the mere intellectual/ emotional levels. It goes to the inner dimension that was already present in the traditions of spiritual philosophy and wisdom, and cannot be denied anymore after new scientific disciplines such as sophrology, the mind’s new science, neuroscience, epigenetics, etc –including the scientific study of meditation, and new methods like mindfulness or focusing-.
- Integral value-based education brings out the key for the future of mankind: the transformation of the human being towards higher states of consciousness and vibration in solidarity with all.

- From the previous remarks, we can define **the main characteristics of integral education, that should be:**
 - **Multidimensional or integral/ holistic** (like humanity and the cosmos), integrating all the dimensions of the human being within a vision of interdependence and underlying unity.
 - **Interdisciplinary**, crossing the rigid limits between subjects and disciplines.
 - **Intercultural and international** -towards the unity of mankind-.
 - **Child-centred**, recognizing the uniqueness of every child, his or her own talents and vocation, and hence multiple intelligences or the multiplicity of geniuses towards self-knowledge and knowledge of the deeper self.
 - **Socratic**: based upon Socratic dialogue/ tutorials, and empathy/ love.
 - **Value-centred**, beyond materialistic patterns (intellectual/ emotional) unfolding **the inner/ spiritual dimension**.
 - **Experience-based: not only at the cognitive level but also in ontological/ spiritual terms**. Modern schooling and even the whole modern civilization have been excessively abstract and dehumanized, producing a unique hypertrophy of the intellect and the ego. Beyond mere intellectual knowledge, we must bring the growing child towards a direct and inner experience. Education cannot be dissociated from life, whereas modernity has been inseparable from alienation –from ourselves, from our deepest self-.
 - **Transformative**: directed towards the transformation of the human being.
 - This is not a new catechism but a real, ontological transformation of the human being, and hence the world (there is no separation).
 - It is not a matter of religion, it is a new humanism –while we respect all spiritual traditions and religious backgrounds, or any personal belief-.
 - It is not a matter of subjectivism or relativism. It has a scientific foundation; it deals with reality.
-
- In the process of daily implementation, **integral education must also be systemic**, which means that it must take into account all the systems interacting in the educational process: certainly the child and the pedagogy, but also the family background, the community and the social/ cultural context –which includes the public policies directly affecting education-.
 - Integral education must **question the structural inputs in the educational process**, like the physical setting and the time framework.
 - In the horizon of integral value-based education, **the training of teachers** will be decisive. The child will experience what is directly brought by the teacher, not by any theoretical design. If we want to implement holistic education, we must be aware that the human quality of the teacher will be as important as the academic qualification. We cannot inspire what we do not experience ourselves. The teacher must be a living example. Genuine education can only be a loving guidance, accompanying the growing human being in his or her own process. The educator should avoid an excess of direction or interference, but he should never dismiss the pedagogic function either. Education implies a middle path as anywhere else in human life.

- After the pedagogic innovation by eminent educationists such as Rousseau, Pestalozzi, Froebel, Steiner, Montessori, Dewey, in the West, or Vivekananda, Tagore, Aurobindo, Krishnamurti, Sathya Sai Baba, in India,

Recent developments in the academic arena have provided new scholarly foundations for integral education; for instance:

- **H. Gardner's Theory of Multiple Intelligence**, which requires a multidimensional/ holistic kind of pedagogy as expounded in this project. This theory was already prepared by other scholars like L.L. Thurstone and J.P. Guilford, and it has been supported by disparate scientific disciplines like neurology, developmental psychology and artificial intelligence.
Gardner has identified **seven forms of intelligence**: logical/ mathematical (scientist), spatial (architect), linguistic (writer), musical (composer), bodily kinaesthetic (dancer/ athlete), interpersonal (politician, manager, educator) and intrapersonal (towards inner life/ spirituality).
We can obviously design different typologies. In any case, this influential and universally accepted Theory of Multiple Intelligence is deeply coherent with various proposals of integral education developing all the domains of human personality.
- **D. Goleman's Theory of Emotional Intelligence**, a recent behavioural model rising to prominence after 1995 from previous contributions like H. Gardner himself, P. Salovey and J.J. Mayer. This theory has also produced further academic evidence for integral education, while it has become very popular in organizational/ management development, human resources, etc. It is directly connected with holistic education and Philosophical Idealism through its emphasis on love, compassion, human values and the inner dimension. Basically, the Theory of Emotional Intelligence argues that conventional intelligence is too narrow –just like traditional modern schooling-; there are within the human being wider areas of emotional intelligence. This is what integral education –as defended by this paper- tries to unfold through a multidimensional pedagogy.
- **J. Kabat-Zinn and modern forms of Mindfulness**, which integrate methods of inner work from Yoga and Buddhism/ Zen with Western science. This Professor of the University of Massachusetts has proved through empirical/ scientific methods that the inner dimension exists and can positively transform the human being for better –which constitutes a major feature of integral education as proposed by this paper-.
- **E. Gendlin's Focusing, Thinking at the Edge and Philosophy of the Implicit**. This American Psychotherapist and Philosopher, scholar at the University of Chicago, has opened new avenues for thinking beyond the mere intellectual level, unveiling therefore other dimensions of humanity as developed by integral education. Therapeutic evidence brings further confirmation for this multidimensional nature of humanity, and hence, education.

Gardner and Goleman's theories have become widely accepted by scholarship and public policies.

However, we must remember that both multiple intelligence and emotional intelligence were clearly formulated long time back by major philosophers of education such as Rousseau and the Romantics.

➤ In any case, integral education must always keep in mind that **the multiple intelligence approach and child-centred pedagogies are inseparable.**

- Integral education must offer the growing child a vast spectrum of disciplines, subjects and methods encompassing the multidimensional nature of humanity and knowledge.

In this Project, we have organized the multidimensional nature of education through a five-fold pedagogic path.

All the children must be invited to explore all the different areas, so that they receive an integral education that unveils and nurtures their holistic personality.

- Only this integral/ multidimensional curriculum can be child-centred and oriented towards the self-education of the child.

If a child cannot explore all the main areas of human life and knowledge, how can he or she discover which are his/ her deeper inclinations and talents?

Only by offering the child a holistic curriculum can we help him to better know himself and unfold his unique individuality and skills.

A child-centred pedagogy and self-learning strategies can only work if the curriculum is integral enough to allow the growing child to manifest his holistic and multidimensional identity, and from here, to allow him to better understand himself and disclose his vocation and uniqueness.

➤ **This means that an integral form of education must wisely combine:**

- The compulsory character of a basic curriculum for all –which must be holistic and multidimensional in depth-.
- With child-centred and self-learning strategies that allow the growing child to partially decide and design to a certain extent his own curriculum in order to stimulate and train his own inclinations and skills.
This requires optional subjects and evaluation methods that foster creativity – together with sensible individualized tutorials and monitoring-.

A humanistic pedagogy must also take into account the lucid insights of Prof. Peter Gray, a renowned developmental psychologist from the USA. His book “Free to Learn” has certainly been anticipated by J.J. Rousseau and Dr. Montessori, but Prof. Gray restates these fundamental points for the present context with the needed academic/ psychological support. His basic claims can also be traced back to literary history; Peter Pan and the Little Prince stand as symbols of this humanistic pedagogy, which was clearly defended by the whole Romantic movement.

From Rousseau, Romanticism and Montessori to Dr. P. Gray.

A humanistic pedagogy must consider the following fundamental points.

- Modern schooling was established by the State not to promote freedom of thought or self-realization but rather to indoctrinate, control and standardize. It is essentially reductionistic, coercive and repressive. The French philosopher, M. Foucault, has brilliantly analyzed this historical process together with the major authors of European critical thought.
 - The last decades in the Western world have dramatically eroded free playing and self-learning through an obsession for tests, marks, extra-curricular, etc, boosting an over-scheduled childhood or youth more and more pressurized under an excess of adult control. This has produced increasing anxiety, depression, behavioural problems and suicide. This gloomy scenario has affected boys much more than girls –statistics are startling-, since boys need very especially some spaces for free playing, self-learning and exploration.
 - Proper education must provide enough time for free playing –between children, without adults-. Free playing goes far beyond play-way methods controlled by the adult educator. It will easily bring children from different age groups to mix spontaneously, which is highly pedagogic –modern education has sharply divided and demarcated the age groups-. Scouting may encourage suitable opportunities for free-playing, although the adult world must allow children to freely play among themselves in a variety of circumstances also decided by the children themselves.
 - Proper education must promote paths of self-learning or self-education, when adults facilitate the context and the tools, freeing the children to explore and discover by themselves, being active rather than passive.
 - Integral humanistic education must ultimately find out the middle path between the two extremes that the history of education has encountered –the typically modern coercive form of education with an overwhelming adult control, and the opposite extreme, as a reaction, of dismissal of the pedagogic responsibility of the adult through a misunderstood concept of freedom of the child-. The middle path has to do with qualified freedom, and also with the deepest spirit of the Gurukula, when the adult educator –the genuine Guru- is a friend, philosopher and guide, who accompanies the youth through pure love towards his self-realization so that he becomes his own Guru-.
- Nonetheless, the scientific basis for integral education should not discard the most important thing, which is the philosophical depth unveiled by any earnest holistic pedagogy.

- Needless to say, all these recent scholarly developments culminate in the paradigm shift already outlined with the advent of quantum physics and other branches of new science, such as: new physics, relational theory, epigenetics, new biology, the Gaia Hypothesis, neurology, the mind's new science, sophrology, Jungian and transpersonal psychology, etc.

From the forerunners of quantum physics onwards, the different branches of new science have evolved a historical dialogue with the millenary traditions of spiritual philosophy and wisdom –in particular Vedanta and Buddhism-, in the horizon of a holistic paradigm and the unity of science and spirituality. The most famous scientist of the XXth century, Albert Einstein, also trod this dialectical path from a broad aperture of mind.

- The development of this new paradigm will certainly consolidate **seven fundamental areas of human life deeply coherent and complementary:**

- **Spirituality** : the inner dimension –the third eye of knowledge-.
- **Education**: integral/ holistic/ multidimensional pedagogy.
- **Health**: integral/ holistic health or medicine.
- **Science**: quantum physics/ quantum science with values.
- **Economy**: ethical market economy/ common good economy with social policies and circular economy.
- **Politics**: not only indirect but also direct democracy and (integral) federalism.
- **International Relations**: cooperation and solidarity towards the unity of mankind and a world government –world federalism-.

Just as the traditional school system of the modern age was the pedagogy of Industrial Revolution, capitalistic expansion and colonization,

Holistic/ integral education will be the pedagogy of this emerging paradigm, which implies, in fact, a new humanism and a new concept of humanity: a multidimensional human being in interdependence with a multidimensional cosmos.

Only this new paradigm and this new humanism can overcome the present crisis of civilization and quicken a new step forward in human history on Earth.

From science to philosophy: the capital issue of human consciousness.

The greatest Romantic thinkers, like Herder, pointed out a fundamental reflection for the future of mankind: whereas the modern age has certainly witnessed an extraordinary and rapid material development, human consciousness has not developed to the same extent. Einstein stated that modern science/ technology is like an axe in the hands of a pathological criminal.

If we examine the history of humanity since the dawn of the ancient civilizations till today, we can easily realize that the evolution of consciousness has been very limited. There has been some advance, there is no doubt about it: the legal frame for human rights for instance. Still, Herder or Einstein outline an undeniable fact: the evolution of consciousness has been much more limited than the material development, for which modern science/ technology is more dangerous than ever, which is quite obvious if we just look around us today.

This psychological and philosophical perspective brings out all the depth of integral education. Few sages or educationists have given us a clearer picture than J. Krishnamurti, though ancient masters like Buddha already showed the path: a middle path of wisdom that should be at the core of the educational process, that is, the transformation of the human being towards higher states of consciousness.

If we observe human history, we can conclude that the main evils, limitations or structural flaws are still here amongst us; there has not been any major change in the human mind or psyche. Never-ending desire, discontent, suffering, selfishness, division, prejudice, conflict, domination, violence, alienation, are still massively present in the contemporary world, and the prevailing educational systems through history have systematically overlooked the issue of consciousness and denied the need for an education of consciousness.

As Buddha taught, suffering is universal, it ultimately comes from illimitable desire, selfishness and division of the ego; still, there is a way out of this universal human tragedy: a middle path of wisdom, the transformation of consciousness.

J. Krishnamurti has provided a lucid presentation of Buddha's message for the modern world, while he has brilliantly outlined all the implications for education.

Pedagogic issues of special significance.

- In the naturalistic/ holistic reaction against the sheer realism of pure academics, typical of the mainstream of modern schooling, **educators have become aware of the profound repression and coercion exerted upon the child.**

It is today well-known in medicine and psychology that a young child cannot be quiet like college student, just because his or her body has a biological tendency and need to move and express itself. Modern schooling has brutally ignored this scientific fact by forcing young children to sit on desks for hours and hours like college students. A sensible pedagogic system must allow young children to move and play, which means to respect the nature of the child and the growing process of the human being. Hence, play-way methods have been advocated by Waldorf Schools, Naturalism and Pragmatism, especially in primary school, though scouting can also remind us of the different role of playing for young adolescents. Other educationists such as P. Gray have stressed the importance of free playing avoiding the excessive control and intrusion of the adult.

- In the historical reaction of naturalistic/ holistic pedagogies against the excesses produced by academic realism, great educationists such as **Steiner** have also proposed **artistic or creative ways of teaching** (even for the academic subjects) towards **the child's exploration and self-learning.**

We must underline that self-learning lies at the very roots of Ancient pedagogies such as the Vedantic Gurukula or Buddha's teachings. Philosophical Idealism and spiritual philosophy have always encouraged self-learning in its deepest meaning –this is Steiner's background-. In front of the boring and dry chalk and talk bookish methods, it is possible -not only for younger students- to teach the same contents in more interesting ways, more appropriate to the age group, and more creative, arising the interest of the child and making him participate more actively and discover and learn by himself. In all the academic subjects, some artistic/ creative way of teaching towards self-learning can be introduced, which, being more suitable for the nature of the growing child, will undoubtedly produce better academic results –apart from a deeper and more integrated development-.

For younger children, we can use the movement of the body, singing, music, colours and forms, stories, a little bit of dramatization, small games, play-way materials, etc. For elder students, we can use the Socratic dialectical method towards the active and creative participation of the youth in a process of self-learning, with research, essays, problem solving, case study, projects, etc. We can obviously make use of

Montessori's self-teaching materials providing for all disciplines exercises and activities through which the child experiences and learns by himself or herself.

- Finally, educators and adults in general must avoid the common tendency in our culture to overwhelm the child with an excess of instruction and warning telling him or her everything. We must allow children to explore, discover, experience, do and learn by themselves -which does not deny at all the educational responsibility of the adult-. From this perspective, free playing without adult intrusion is totally needed in the process of growing up.

Pedagogic tools underlined by Anthroposophy (Steiner), Naturalism (Rousseau/ Montessori) and Pragmatism (Dewey); in front of the over-emphasis on pure academics and exclusive chalk and talk/ lecture methods as encouraged by Realism and exalted by the mainstream education in modern schooling.

- **Play-way methods/ materials and games with free playing**, certainly for the primary section, but also for middle school (in the spirit of scouting for instance), corresponding to the very nature of the child and his or her most natural way of learning. Games have been openly neglected by the mainstream of modern schooling as a proper pedagogic tool, just allowing sports for one or two periods per week –in a competitive way-. We must also recover the spirit of cooperation instead of so much competitiveness, and, in combination with sports, games must unfold their own pedagogic potential. In our school design, we reserve one hour for sports, games and free playing together with gardening after the evening workshops. However, play-way methods/ materials and small games can also be introduced in the morning academic session or in the evening workshops, especially for younger children, not only in the breaks but also as pedagogic tools. The campus itself should incorporate some playing areas with children's park and scouting constructions.
- **Story-telling with poems and songs**, something as old as mankind, through which all ancient cultures were transmitted, but largely forgotten by the modern age. Story-telling will be a normal tool in human values periods, though it can also be deeply pedagogic in English, Foreign Language and Humanities. Again, it should welcome the participation and creativity of the children.
The general role of quality culture; much more than general knowledge: aperture of mind, tolerance, and human/ spiritual values to heal the soul.
- **Gardening and the contact with Nature**, which implies **a direct observation of Nature with direct experience/ experimental methods and activities**. It has been empirically proved that children who have a direct contact with Nature and are educated through experimental methods develop faster and better –also academically-. Children imprisoned in a class-room during all their process of growing up with exclusive chalk and talk and bookish learning will develop duller personalities and more limited minds.
- **Scouting and social service to the community** –incorporated by the prestigious International Baccalaureate today-. In various school designs, these activities would mainly happen on Saturday –that is why they leave Saturdays free from academic teaching or normal schooling, breaking with the predominant tendency in India to include Saturday as a normal school day, which has been dropped in many Western countries-.

- **From music to music-therapy; from art to art-therapy.**
Beyond their proper aesthetic dimension with creativity and emotional intelligence, all the arts offer a therapeutic/ Socratic potential in terms of self-inquiry, healing, positive transformation and self-realization. The results, especially with youths at risk, have been astonishingly positive everywhere. For this, the arts and art-therapy constitute a fundamental pillar of education.
- **The model/ inspirational role of the mentor or guardian** –in the spirit of the Socratic dialogue or the Indian Gurukula, the relationship between master and disciple, which has existed in all indigenous/ ancient cultures-.
The mentor/ guardian can bring a closer guidance through love/ parental care while being a living example. This should be the ideal of any teacher in a holistic pedagogy: friend, philosopher and guide; true “auctoritas”. The Gurukula is especially important for boys, who crucially need the figure of the male mentor and positive male role models to grow up.

The teacher as a genuine Guru unfolds the deepest pedagogic role of the adult, which is relational and dialectical towards self-learning and self-realization. This positive and more profound vision of the adult might counterbalance the negative image of the educator created by mainstream schooling through its overwhelming and coercive rule upon the child. It can also unveil the most needed middle path:

- avoiding the repressive imposition of the educator,
- and on the other extreme, the dismissal of the pedagogic role of the adult through a misunderstanding of the child’s freedom.
- Modern mainstream schooling has produced the first extreme,
- while many progressive pedagogies, as a reaction, have brought the pendulum to the other extreme.

A humanistic and integral kind of education must wisely follow the middle path, beautifully expounded by the Upanishads of India for instance.

- **Continuous holistic assessment** that includes qualitative/ human assets and a close interaction with parents/ families.
In front of mere quantitative marks, a holistic and humanistic kind of assessment must consider all the facets and regard the student as a whole and as a human being.

In general terms, the forerunners of holistic education, Naturalism or Pragmatism have not encouraged the excesses that many progressive pedagogies have produced in the last decades in the West.

The excess of bookish scholarly knowledge given by traditional pedagogies has produced a reaction that has often gone into the other extreme, with an abuse of playing methods, activities, self discovery, group projects, issues and problems, etc, leading to the dismissal of the role of the teacher, and the decay of cultural and intellectual standards.

The major figures of integral education try to avoid all sorts of extremes, striving for a middle path and a balanced, harmonious pedagogy, where the different contributions of the major schools of educational philosophy are integrated in a wise way for the benefit of the child, for the sake of his or her education and realization as a human being in freedom, and also under the necessary loving guidance of the adult or educator.

In the horizon of this middle path, holistic pedagogies should always keep in mind the illuminating example of the Indian Gurukula, the master with his disciples, where the process of self-education was inseparable from the loving guidance of the master, who was a guide, philosopher and friend, like a second father and a true Guru.

We find this **pedagogic middle path** in the works of one of the pioneers of integral/ progressive pedagogies in the USA: **John Dewey**.

- Dewey proposed a radical reform of the traditional school system in the line of a Socratic child-centred holistic pedagogy.
- But he always warned against the erosion of the teacher's pedagogic responsibility by pushing too far the concept of self-learning.
And he also warned against the risk of weakening academic standards through an abuse of play-way methods, activities, projects, issues, etc.

Dewey defended a middle path in education that lies at the very core of genuine holistic pedagogies as defended here.

The educational process should strive for **an equilibrium between:**

- imparting knowledge in a Socratic way,
- Hence allowing the child to experience and learn by himself or herself.

We believe that the International Baccalaureate from Geneva strives for this kind of equilibrium.

Techniques of inner work from the spiritual traditions of mankind and also from the last developments of new science (the mind's new science, sophrology, etc):

breathing, relaxation, observation (of what happens within), concentration, visualization, meditation, yoga, katsugen undo, etc.

Our schools will emphasize breathing and meditation in the light –Tejo Dhyana- in the line of Vedanta, reminding the metaphysical significance of Light in coherence with the last findings of quantum/ new science.

This fundamental and most profound facet of education, blindly overlooked by modern schooling, is now rediscovered by postmodern societies even in the scientific arena. The door was opened by quantum physics, and new scientific fields like the mind's new science or sophrology have consolidated the aperture towards the deepest domain of humanity, and hence, education, with an undeniable potential at different complementary levels: therapeutic cleansing or healing, and knowledge of oneself towards self-realization –manifesting the inherent divinity of the human being-.

Some basic techniques like breathing, relaxation, etc, can be **fully developed in the afternoon workshops** devoted to the holistic nature of humanity and education; but they can also be used **for some minutes in the morning assembly or in the morning academic session** –not only in the breaks but also to start any period-.

In fact, we should avoid the dualism that often reappears when we try to evolve towards integral education, which does not consist of adding one hour of yoga to the academic subjects, but rather, in totally, deeply integrating all the domains of humanity for the blossoming of the child from within. Hence, inner work should bring us to act here and now in our community. Even the academic subjects and the whole school life should be imbued with the profound spirit of the inner being.

Integral education invites the growing human being to discover himself or herself

WITHIN; only then, can we unfold our most profound reality or being, our true spiritual self, from which the universal human values like peace, love and compassion naturally arise. Only from this inner depth can there be a real transformation.

The positive effects have been widely recorded all around the world: more concentration, better academic results, more peaceful school life with less conflict and tension, emotional balance, enhancement of health, and last but not least, human realization, which means the realization of everyone in his or her unique vocation in solidarity with all. Only this inner transformation will transform the world around.

Education does not consist of lists of marks from mechanic tests. Educating the human being should be the most fundamental goal of education.

Because the most important has been totally neglected by the advent of modernity through a blindly technocratic and materialistic civilization, we must now face all the evils around. As the philosopher Raimon Panikkar warned, the future of mankind depends upon the crucial shift from technocracy to humanism. Here lies the educational message of J. Krishnamurti, and the proposal for education in human values of Sathya Sai Baba.

Education in Human Values -as taught by Sathya Sai Baba-

The value perspective is integrated through different pedagogic strategies:

- a direct teaching of human values (in school periods);
- incorporating a value-centred pedagogy in all academic subjects;
- infusing the values through a life-style, primarily in the hostel;
- unfolding the depth of human values from inside through proper spiritual tools: meditation, yoga, prayer and “bhajans” (singing);
- the direct contact with the “guru” –master- in the “mandir” –temple-.

* The leitmotiv of the schools would be: **Simple life, high thinking.**

* Another pedagogic principle would be: **Youth led by youth**, which implies a system of monitors through which the elder children take care of the younger.

* **Self-reliance** is also highly appreciated, that is, the direct responsibility of the students in hostel for a series of activities, like: cleaning their room, serving the food, maintenance of the hostel stores, etc.

* Finally, the whole pedagogy would follow the inspiration of **the Gurukula**, the community of the master with a small group of disciples. In the boarding schools, teachers live with the students, take care of them, and supervise not only their formal instruction but also all the other activities and their general welfare.

* In this special atmosphere, the hostel life is imbued with values like **brotherhood, community life and sharing.**

With regard to the spiritual practice:

- The meditation would be inscribed in the Vedantic tradition, as restated by Sathya Sai Baba: meditation in the light, especially suitable for children and adolescents.
- The longer periods of collective prayer –in hostel and school- would include a diversity of activities, among which: a speech delivered by a student facing the audience, quotations, Vedic chanting –in Sanskrit-, and a collective prayer.

All Sri Sathya Sai Institutes are based upon a **pedagogic triangle**:

- the school or college: for academic knowledge –with ethics and values-;
- the hostel: with community life and brotherhood;
- the “mandir” –temple-: as a symbol of the spiritual foundation of everything.

However, the key of this holistic system of education would be in the integration of the three peaks of the triangle, which implies the fundamental **coherence between thought, word and deed.**

We have warned above that integral education cannot be reduced to the last developments of new science or academic psychology/ pedagogy. **If we do not tackle the crucial issue of the human mind or psyche with all its philosophical depth, that is, the transformation of consciousness, we will just overlook the very foundation of holistic pedagogies**, and we will cut down all the depth of integral education to a superficial pseudo-progressive pedagogy based upon play-way methods, etc.

There is an intelligence in Nature, in our own organism for instance, and there is also a movement towards harmony that the oldest human societies were still able to perceive. This feeling of being part of the Cosmos has been gradually lost, and totally destroyed by modern civilization, which has overemphasized the external senses to nurture consumerism, while it has seen the Cosmos as a dead machine to be exploited till devastation by an unsustainable economic system. What does human intelligence consist of?

The only way out of this vicious circle ending up in self-destruction lies in a real, ontological transformation of the human being towards higher states of consciousness and vibration, where the fundamental human values emerge from within, and the recognition of diversity unfolds the most profound awareness of unity and interdependence.

Socrates showed the path 25 centuries back by following the inscription on the Temple of Delphos: -Oh Man, know yourself and you will know the universe and the gods.

The heir of Theosophy, J. Krishnamuti, has taken up the torch of humanism for the modern world. While renewing the ancient teachings of wisdom given by classical sages like Buddha, he has spoken a modern language and has appealed to the modern mind. His general philosophy proves to be particularly suitable for the educational arena.

This lucid sage of our age has invited every human being to observe himself or herself: the Socratic path of **self-inquiry** towards self-realization, knowing that unfolding all the depth of humanity, the most profound human values with their ontological texture, and the real consciousness of unity, requires the **catharsis** –in Greek- or cleansing of our own prejudice, blocks and evils. Moreover, self-inquiry is inseparable from **dialogue and relation**, since we are not separated and we are a social being –as Greek philosophy underlined-.

The educational process must find ways appropriate to the age groups to undertake in simple yet efficient terms this fundamental process of self-inquiry, cleansing and self-realization, without which humanity will remain stuck in the old patterns of the past: selfishness, division, conflict, alienation and violence, with an increasingly powerful technology that will mirror the axe in the hands of a pathological criminal described by the greatest scientist of the XXth century, Einstein.

In the educational project presented here, we try to design a pedagogic process capable of addressing the Socratic path in an open way suitable for our time.

Modern materialism drags along an irrational prejudice against meditation/ inner work and the inner spiritual dimension.

Today, this prejudice cannot be sustained anymore, and **we must dare to defend the inner spiritual dimension and meditation/ inner work in the educational arena.**

Public authorities cannot deny it after the amount of evidence put forward in the last decades throughout the whole Western world.

- In the 1970s and 1980s, the expansion of **sophrology** and **yoga** in the Western world opens the door to the inner dimension.
- The **neuroscientific experiments on meditation**, especially on Transcendental Meditation (TM), prove on scientific grounds that meditation does have a positive impact on the brain, psyche and body.
- **Around 20 universities** study the meditation practice **between 2000 and 2012**: the utilization of sophisticated devices shows that meditation modifies the volume of brain regions in terms of number of neurons and number of neurological connections; grey matter also increases, and the immune system improves.
- **Richard J. Davidson**, professor of psychiatry in Madison (Wisconsin), realizes that meditation produces positive epigenetic changes. In order to be activated, a gene must express itself through a specific protein; otherwise, it may stay silent. Both the environment and mental states can modify the expression of genes through a kind of process called “**epigenetics**”. It is proved today that meditation has a positive epigenetic impact on our genes.
- In the 1970s, the renowned US researcher **Jon Kabat-Zinn** creates the Mindfulness-Based Stress Reduction (MBSR) while his scientific research and clinical work at the University of Massachusetts manifests with undeniable empirical evidence the noticeable benefits of meditation.
- **Mark Williams**, reputed professor of psychiatry at Oxford University, implements a meditative model especially designed for persons suffering from depression: the Mindfulness-Based Cognitive Therapy (MBCT).
- In Paris, the psychiatrist **Christophe Andre** utilizes this kind of meditative therapy at the Sainte-Anne Hospital.

- **Three Eastern men** have an impact in the Western world while spreading the teaching of meditation: the Japanese Zen monk **Taisen Deshimaru**, the Tibetan Lama **Chogyam Trungpa**, and the Burmese Theravada master **Goenka**.
- Later, **Chade-Meng Tan** teaches mindfulness to highly stressed employees of Google.
- All around the Western world, meditation teachers help employees of commercial companies enhance their mental and physical health and find a more meaningful life.
- In 2012, the world famous US media professional **Oprah Winfrey** brings meditation into her first rank television show.
- In 2012 also, **the US Senator Tim Ryan** presents a book centred on the inner dimension with political outlook: "A Mindful Nation".
- In the USA and the UK, the benefits of meditation are officially recognized by the Ministries of Health, hence acknowledging all the scientific evidence accumulated in the last decades.
- In parallel to that, basic handbooks about meditation become world best-sellers with more than one million sales.

Can we continue to stick to a XIXth century outdated prejudice, and deny the scope of inner work, meditation and spirituality for the educational field?

The development of these branches of new science and their social impact can decisively bring the modern world to rediscover all the depth of the traditions of spiritual philosophy and wisdom and apply it to a new kind of education that will really educate human beings, instead of merely training them at the intellectual level to later throw them hopeless, soulless and valueless in the professional, economic or political life, forced to cope with stress and depression by swallowing tablets.

Do we need more evidence to finally integrate the spiritual dimension and meditation into the educational process?

Within the general framework of the new holistic paradigm, integral education should develop two fundamental aspects of human consciousness, parallel to the very nature of the cosmos itself: **relation and dialogue.**

Quantum physics and relational theory have discovered what mystical philosophy had already revealed centuries back: that reality is essentially relational, and that within an underlying unity everything is interconnected in interdependence. A new kind of integral and humanistic education must be relational like reality itself.

The relational dimension includes several facets, from the most obvious to the most profound:

➤ **At the external/ social level:**

- Education should develop community life and the sense of brotherhood and unity – through hostel life when possible, through the whole campus life in general, and also through open-air activities in week-ends or holidays-.
- Moreover, integral education should foster interpersonal relationships based upon love and compassion.
- For academic work and the whole school life, we must arrange personalized tutorials and guardianships -in the Socratic spirit or the Gurukula-;
- Together with the pedagogic responsibility of elder children towards younger –through a sensible system of monitors imbued with brotherly care-.
- Furthermore, it is highly educational to organize programmes of social service - appropriate to the age groups-;
- And also units of Boy Scouts and Girl Guides.

➤ **At the internal level; the realm of mind and consciousness:**

- The school must arrange interdisciplinary spaces within the academic curriculum in order to soften the traditional subject boundaries and nurture relations between disciplines, topics and concepts.
- In our school design in particular, we will set up different kinds of links between the morning curriculum teaching and the afternoon workshops devoted to the other dimensions of the human being, establishing connections that will manifest our holistic nature.
- In general terms, we must develop a relational mind that sees not only objects but also relations –and hence, interdependence-: the transition from noun to verb.
- Finally, self-inquiry: from the knowledge of the outer world to the knowledge of the inner world, or knowledge of oneself, observing what happens within ourselves in dialogue with others: from I to You, and from You to We (unity).

School failure and special needs.

From sociology to psychology: pedagogy is the key.

- School failure and behavioural trouble have become a massive problem in post-modern societies, and it has massively affected boys more than girls –something that is still largely ignored precisely because it affects the male gender and not the female-. It is undeniable that **school failure** –affecting boys more than girls- **constitutes a social phenomenon that requires a sociological perspective**. Still, an individual dimension cannot be overlooked, and from a more psychological approach we can ultimately realize that pedagogy is the key.
- An educational problem like school failure may have some roots in the personal context of the student –including family, which again may arise sociological implications-. However, recent research has shown that **sometimes there are psychological factors that cannot be denied**. Some children manifest **neurological disorders** that have a direct translation into the educational process and school life. The sociological reasoning cannot cover up the neurological problem or **other psychological factors**. A sensible approach to education should combine the different factors that can be identified.
- Still, the solution is not merely psychological, because the child with some neurological/ psychological trouble will not be taken out from school and just put in the hands of a psychologist for life. Whatever are the psychological/ neurological issues, the child must stay in school and must be adequately treated according to his or her condition – not according to an objective pattern that does not fit him or her-. Hence, **pedagogy will be the key**, which means that a humanistic educational system can only be **child-centred**: taking into account the reality and vocation of every student. Child-centred pedagogy is a synonym of education. For this, teachers deserve the necessary training, and must be given the necessary tools and conditions –apart from specialized teachers-; if a teacher must take care of 40/ 50 or even 80 children –as it occurs in government schools in India- a child-centred pedagogy will be just a dream.
- In order to prevent school failure it is important that teachers identify as early as possible any special neurological/ psychological problem. Then, the school must be able to adequately treat that child. Instead of forcing him into a rigid pattern that may be suitable for other children, a child-centred pedagogy will find the way to adapt the educational process to the nature of the child –whereas the mainstream system is doing the opposite: forcing the child to adapt him into an external scheme that may be very far from his or her own reality-.
- Here, **dyslexic children must find their place in the school**, making it clear that they are not abnormal but totally normal in their own genius. In fact, a number of great men in cultural history were dyslexic. Apart from the adequate treatment, this child may require a moral oral kind of education –as it happened in the ancient Gurukula, with the master/ disciple relationship-; many respond even more than any child to love, and they can be very creative in the artistic fields.

- **When we face the common problems of modern educational systems, experts in education brandish two sorts of argument:**
 - **At a social level**, we can point out **sociological factors** that will describe structural problems.
 - **At an individual level**, we can find **personal/ psychological problems** related to a particular student –including the family background, which can immediately appeal to the cultural/ social context, and hence, to a sociological perspective-.

- We can easily see that the two points of view cannot be dissociated –the big lesson of interdependence rediscovered by quantum physics and systemic theory-. In order to tackle educational problems in a sensible and efficient way, both dimensions –social and individual- should be combined.
 - **Governmental authorities** cannot ignore the sociological implications; therefore, they must face **the structural problems** and try to solve them.
 - But pure sociology or just public policies will not help any children in their daily life –in the classroom or at home-. **The microcosm of the classroom –or the school-** constitutes the daily reality of the child, and here, at that level, a child-centred or humanistic pedagogy must work with the specific conditions of every child. As we said above, the material context and the training of teachers will make it easier or more difficult -or just impossible, in the classroom of an Indian government school, for instance, with 80 children and a teacher who has never been properly trained-. In this regard, governmental authorities can play a crucial role.

- **We must also be aware of history** to be conscious of the historical inertia that the modern school system drags along. The modern school –so different from indigenous or Ancient pedagogies- was created as a social/ political tool to standardize and to control. The research of the French philosopher Michel Foucault, brilliant and profound, is eloquent enough, though there is a lot of scholarly literature analyzing in detail this historical process. Moreover, the predominant school of educational philosophy in the mainstream system, Realism, has exclusively focused on academics from highly rationalistic/ scientific patterns. Because of this origin and orientation, new schools of educational philosophy have opened the door to other possibilities while enlarging the educational scenario in more holistic and humanistic ways. Here come into the picture Anthroposophy (Steiner), Naturalism (Montessori, after Rousseau and Pestalozzi), and Pragmatism (Dewey). Western scholars often ignore the contributions of other civilizations like India, with great educationists like Vivekananda, Tagore, Aurobindo, Krishnamurti, Sathya Sai Baba, etc.

THE TRAINING OF TEACHERS AND THE COLLABORATION WITH PARENTS/ FAMILIES: GURU-VIKAS together with BALA-VIKAS.

The first pedagogic method is to be a living example oneself. Any educational institute or authority must face the fundamental issue of teachers' training –not only in academic terms, but also and primarily in terms of values and integral pedagogy.

Education does not imply the children only, but the adults too –both teachers and parents-; and sometimes, it seems that the adults need more education than the children themselves. The human process of transformation and spiritual awakening affects everybody, all human beings, irrespective of age.

Therefore, the training of teachers and the association with parents/ families becomes a crucial policy in the agenda of integral value-based education. Teachers -and parents, and adults in general- must undergo themselves some kind of inner work –consciousness and energy- in order to transform themselves and then be able to help children transform themselves too; you cannot transmit it if you do not experience it.

For this purpose, some pioneering educational movements like Sri Sathya Sai Organization prepare stages for the training of teachers from the inner value dimension. Sri Sathya Sai Organization implements this kind of programmes through its Institutes.

Schools of integral education must offer formative activities for adults –teachers, other professionals of education, parents and the general public- together with academic workshops, symposia, etc, on holistic value education. In this field of action, teachers colleges and education faculties should acquire a prominent role.

The school policy towards teachers and parents must include:

- Compulsory training for the teachers of our school.
- Regular teachers/ staff meetings.
- Open courses/ activities for teachers or professionals of education from outside.
- Collaboration with other educational institutes, governmental or international organizations for the sake of education.
- Information/ activities for the parents of our students.
- Feedback and suggestions from the parents.
- Regular interaction with the parents within the campus premises for their children's follow up.
- Regular attendance of parents to school special evenings, events, programmes, etc.

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Section IV.

**The practical tools for
integral education:**

From the pedagogic practice to the philosophical vision.

From technocracy to humanism.

THE PEDAGOGIC PRINCIPLES FOR THE PRACTICE OF INTEGRAL EDUCATION.

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1. Theories of learning.

- The indigenous tribes in the past knew very well how to educate their children –without neuroscience, educational psychology or scholarly learning theories-. We can assert through anthropology and the contacts established in the early period of colonization – before these cultures were distorted or even massacred- that they did not face the typical youth problems that have become massive today –especially among boys-. Moreover, there is something truly astonishing for modern scholarship: these archaic peoples designed a model of human growth through age groups that is deeply coherent with Piaget and developmental psychology. Why? Because they were human like us and had the same intelligence than us –probably more because they did not devastate the environment as we have done-. They also practised the basic method of science through empirical observation and experience.
- The arrogance of modern civilization and scientism must be lowered down. The deepest pedagogic method –ignored or misunderstood today- is thousands of years old: the Socratic Dialogue that lies at the core of the Upanishadic Gurukula in India, and needless to say, that was utilized by Socrates and other Greek educationists.
- **As Kant emphasized**, education is a historical process. Only the blindness of modern technocracy could over-stress the role of educational neuroscience and raise mediocre scholarly presentations while dramatically erasing the wisdom of thousands of years of human experience.
- **As Prof. R. Panikkar stressed**, the cultural imperialism of modernity has fed all the evils of modern societies, which will never be able to solve their problems in depth through the same arrogance, cultural imperialism and technocracy. The modern world must rediscover humility and the wisdom that has been buried below false scientism and technocratic mirage. Modern education could overlook many mediocre theories that have become so trendy nowadays, whereas it should learn important lessons from this accumulated experience of thousands of years and these treasures of wisdom present in all cultures.

The major Learning Theories in the modern world. (Not necessarily incompatible).

- **Cognitivism and Developmental Psychology. J. Piaget, J. Anderson, etc.**

Learning is based upon **3 stage processing**: sensory memory/ short-term memory and long-term memory. We can still differentiate **other kinds of memory**: semantic/ episodic/ and declarative/ procedural.

Students learn through **mental processing**: how information is processed.

Hence **the teacher** must design strategies for students to process information; he/ she must also model thinking tools to challenge students. It is very important to set up a **positive rich environment** for learning.

From the teacher's point of view, it is crucial to attain and maintain the **learner's attention**, and produce positive changes in the student's mental patterns **through various ways, such as**: repetition, rehearsal, review, summary, visual, creative assessment, etc. The **active role of the student** is fundamental.

Piaget designed a whole **theory of cognitive development through four developmental stages** -examined above-: **sensory/ motor** (from birth to 2)/ **preoperational** (from 2 to 7), **concrete operational** (from 8 to 10) and **formal operational** (from 11 to 21 with a turning point around 14/15 in terms of consolidation rather than substantial new development).

Piaget's developmental theory is fundamental in education; it is the basis for the successive school stages: kindergarten, primary, middle school and higher secondary. It is also coherent with Freud's phases of sexual development and comparative/ cultural anthropology.

R. Steiner proposed a mature frame for integral education that does not contradict developmental psychology, but rather utilizes it in innovative terms in order to unfold all the potential of education in a holistic vision.

- **Behaviourism. E.L. Thorndike, I. Pavlov, J.B. Watson, B.F. Skinner, etc.**

Behaviourism lays stress on the **observable behaviour**. Behaviourists insist on the scientific nature of their discipline, which has been denounced as **"scientism" rather than science** by more prescriptive theories and critical thinking.

In the educational field, it explains the **learning process** through observable changes in behaviour while registering the connections between **stimuli and responses**, inputs and outputs. Learning occurs through expected responses to definite stimuli.

More concretely, **students learn** through practice and experience, repetition and reinforcement while re-shaping what they learn. **Practice** is the key to learning.

The teacher's role is to prepare a learning process through successive steps with clear goals and tools. The teacher's task is basically that of a **supervisor**. He/ she must foster **desired behaviour**. Learning is observed by a **change in behaviour**. **Feedback** becomes crucial for the teacher.

This theory emphasizes the **reward system** that operates behavioural change, though skills, drills and practice are also welcome.

- **Social constructivism. Learner-centred. L. Vygotsky, J. Bruner, etc.**

Students learn through construction of knowledge, socializing and self-lead.

This learning theory is closely connected with **student-centred learning**. The teaching process must be centred upon the child rather than the teacher and his/ her pre-conceptions.

Learning also means building knowledge by doing: **Hands on learning**.

The teacher must give questions rather than answers, and encourage team work through relation and cooperation. He/ she is basically **a guide and facilitator**.

This theory encourages projects, group discussion and other tasks where **the student is active** rather than passive. Educators should guide students in **problem solving** and supervise individual and group **projects**.

The goal of education is to stimulate life-long learning beyond the short-term memory poured down into mechanic tests.

- **Connectivism.**

This theory regards **the learning process** as a creative path through which students connect information and wish to know more. **Interconnectedness** is the key to learning. Today, students may learn a lot through informal, networked, technology enabled environment.

The theory stresses the **decision-making** from a **student-centred perspective**, which means that students decide what to learn. Primarily, they must be able to produce something by their own: **learning through actuation**.

In parallel to Social Constructivism, **the teacher's role** is seen as a facilitator; he/ she can stimulate connections and encourage the student's creativity.

- **All these are descriptive theories answering to two questions:**

What is learning? How does it work?

Which involves both **the role of the teacher and the student**.

These are proper Learning Theories.

- **There are other theories which are prescriptive, answering to another kind of more philosophical questions:**

What should we teach? Which values should we convey?

What is the purpose of education? Which again imply teacher and student.

These are more exactly philosophies of education.

Integral value-based education corresponds to this category, though it must also utilize learning theories and the third kind of theory –instructional-.

- **In between both descriptive and prescriptive theories** we still have **instructional theories designing methods for education** to foster learning from one perspective or another. For instance: **Gardner, Bloom, Krathwol, Kolb, etc.**
Instructional theories depend on both prescription –What kind of education do we want?- and description –How does education work?-.

➤ **Gardner's Theory of Multiple Intelligences:**

- Bodily/ kinaesthetic
- Intrapersonal
- Interpersonal
- Verbal/ linguistic
- Visual
- Musical
- Logical/ mathematical

➤ **Bloom's Taxonomy on Learning:**

- Remember
- Understand
- Apply
- Analyze
- Evaluate
- Create

➤ **Krathwol's Taxonomy on the Affective Domain:**

- Characterizing
- Conceptualizing
- Valuing
- Responding
- Receiving

2. The holistic mindset.

We should not indulge in the technocratic mirage of mainstream culture:

- **Techniques** –or technologies- are not primary but merely instrumental.
- First and foremost integral education is a certain **vision**; it is related in depth to a **world view**: whereas modern mainstream schooling constitutes the pedagogy of the Industrial Revolution, Steiner's Waldorf Schools reflect another world view that is metaphysical/ spiritual and is directly linked to European Philosophical Idealism at the antipodes of modern materialism.

If we apply mere techniques without the adequate mindset we will just repeat the typically modern mainstream schooling with new colours only.

The techniques must be instruments of a truly holistic mind. Integral value education is basically an attitude, a state of consciousness. J. Krishnamurti unveiled all the depth of the issue, but very few have really listened to him.

Unfortunately, integral education has been impoverished and reduced to a set of techniques brilliantly expounded in power points and eloquently presented at Tedx Talks. Socrates never became popular and he was even prosecuted because he was disturbing. We have totally erased him today because we have deeply misunderstood his message –which is both cognitive and metaphysical, and also anthropological through the pedagogic love-. The Socratic Method is not a technique; it is an attitude, a vision, a world view, a philosophy, a state of consciousness. Today everything is about educational technologies; philosophy of education has been replaced by technocracy and scientism. Integral education is not a technology nor a technique; it is a matter of pure philosophy, it deals with consciousness. Most of the presentations in You Tube about integral education, self-learning, experiential learning and child-centred pedagogy dramatically overlook the crucial issue of consciousness that quantum physicists have precisely emphasized. Most of the proposals of integral education have lost the ethos, the philosophy, and have just reproduced the typically modern school with a more cheerful face; but in depth it is still the same old paradigm.

Just go to **India**, which the cultural imperialism of the Western world never does –in general- and you will be astonished at realizing that India understands integral education in totally different terms as compared to the USA for instance. In India –as it was for Socrates- integral education has a spiritual/ metaphysical foundation, that quantum physicists comprehend but most of progressive schools ignore. As we said before, the modern world will never be able to face the problems it generates through the established cultural imperialism and technocracy. As A. Einstein warned, you cannot solve a problem within the same state of mind that has created it. Most of progressive schools stay within the boundaries of the same old state of mind; there is no paradigm shift at all –there is only illusion at the surface-. There is a paradigm shift when you really trespass the boundaries and go beyond.

In India, spiritual masters, sages and poets who were also philosophers of education have promoted integral or holistic education on spiritual grounds: Vivekananda, Tagore, Aurobindo, Prabhupada, Krishnamurti, Maharishi Mahesh Yogi, Sathya Sai Baba, etc, all of them have seen **education as:**

- Multidimensional in coherence with the multidimensional nature of reality.
 - Hence integral or holistic.
 - Also value-based with an ethical concern.
 - Ultimately spiritually-based unfolding the dormant Divine nature of humanity.
 - Transformative rather than informative.
 - Therefore blending academics and values, science and spirituality.
-
- To educate is to unfold the inner potential: “educere” in Latin/ “bala vikas” in Sanskrit; not only in cognitive terms but also from a mystical point of view.
 - Which means that education can only be child-centred, experience-based with self-learning. Know yourself: from your talents to the universe and the Gods.
 - Integral education understood in depth constitutes an education for consciousness fostering higher states of consciousness and vibration.
 - This is the only path for a shift of paradigm: we cannot change the world; we can only change ourselves, and only this will change the world.

This educational philosophy is old and new; it can be traced back to the Ancient times –Vedas, Upanishads, Buddha, Plato, etc- though it can also be reformulated for the modern world. These Indian philosophers of education are convinced –like the author of this Project- that this educational philosophy constitutes the only profound response to the problems that humanity faces today. But human beings are free to realize it and make their own decision. A genuine guru and sage never imposes anything –unlike the common ego-; he only suggests. As R. Panikkar said: wisdom is an invitation.

The educational philosophy of these spiritual masters and sages is directly connected with the schools that Western scholarship calls “Philosophical Idealism”, present in all cultures –both in the East and the West-. In European thought its major figures would be Socrates and Plato. Steiner is a direct heir of Greek Philosophical Idealism through Goethe and the Romantics.

Quantum physicists have turned their attention to this kind of Philosophical Idealism –especially in India through Vedanta-. They have realized that the metaphysics of these schools of spiritual philosophy reached the same conclusions than quantum physics and contemporary astrophysics.

For this, we dare to say that genuine integral value-based education constitutes the pedagogy of quantum physics; this historical convergence between new science and millenary wisdom unfolds a new paradigm –with its natural pedagogic translation: holistic value education, just as modern mainstream schooling has been the pedagogy of the Industrial Revolution and its corollary, materialism and mechanism-.

- **R. Steiner made a proposal for integral education –Waldorf Schools-** that is deeply consistent with Indian holistic education, though Steiner drew his inspiration from European sources only.

The main features of Waldorf Schools:

- Integral or holistic education.
- A humanistic and spiritual approach –even metaphysical-.
- Child-centred pedagogy with self-learning.
- Value-based education.
- An interdisciplinary spirit.
- Stress on the pedagogic potential of the arts.
- Emphasis on creativity and imagination.
- The Socratic role of the teacher –in the line of the Indian Gurukula-;

The teacher as mentor.

Steiner aimed at the formation of a free moral integrated human being.

This holistic pedagogy works through a model of child-development in three stages: birth to 7, 7 to 14, 14 to 21. Steiner’s proposal is not incompatible with Piaget’s model of cognitive development. It is a pedagogic adaptation of standard developmental psychology in order to implement integral education in depth.

This kind of education requires special teachers who share the underlying vision; for this, teachers training –in holistic rather than merely academic terms- becomes a fundamental policy of any Waldorf School –and any school of integral education-.

- **M. Montessori designed the famous Montessori Method**, laying stress on **self-directed learning** through self-directed activities with **pedagogic materials of five sorts**: practical life, sensorial, mathematics, language and cultural subjects.

It has often been overlooked –or even denied- that Montessori was a member of the Theosophical Society, but she was indeed, which means that the Montessori Method is related to Philosophical Idealism.

Many Montessori Schools share the materialistic patterns of mainstream schooling and civilization, but Montessori regarded the Child as a Soul, the Child as God.

From this point of view, the Montessori Method is not only a strategy for self-learning but a whole proposal of integral education with its proper spiritual foundation.

Quite obviously, Dr Montessori was aware of the weight of the materialistic prejudice, so she was prudent in dealing with the spiritual domain.

Many Montessori Schools have just misunderstood the message of their founder –as usual in the human condition-. We must go back to the life of the Italian educationist to rediscover all the depth of her educational philosophy, linked to both Naturalism and Philosophical Idealism.

In general terms, many advocates of integral education have totally overlooked the inner spiritual dimension because they shared –unconsciously- the materialistic prejudice of mainstream culture. This kind of mutilated integral education –through ignorance or prejudice- stays within the boundaries of the old paradigm; there is no paradigm shift at all.

3. Experience-based education/ experiential learning.

Instead of the mainstream frontloading students and teacher demos only:

Acquiring knowledge/ skills/ expertise by doing –not mere listening/ memorizing-.

Human beings learn best from their own experiences –rather than passively following a theoretical discourse coming from outside, teacher or parent-.

- To learn through experience on doing.
- And then reflecting on doing: feedback.
- Finally to enhance or modify thought/ action.
- Together with abstract conceptualization.

Which means that we learn:

- Through achievements.
- By realizing the consequences of actions.
- And also by failing –and then reflecting/ rectifying-.

This requires:

- Self-initiative: students must actively do something by themselves-.
- And self-assessment: reflecting/ rectifying through their own feed-back.
- Under the caring guidance of the teacher/ adult –who is there to help-.

The role of the educator: (he/ she does not simply disappear).

- To prepare the learner for the experience.
- To supervise how the learner selects the experience and goes through it.
- To monitor the feed-back/ self-assessment operated by the learner himself.

Benefits from experiential learning:

- Acquiring knowledge and skills in more efficient terms on the long term.
- Stimulating motivation to learn –beyond the common boredom-.
- Providing a sense of reality –beyond mere bookish knowledge/ learning-.
- Enhancing inquiry and creativity.
- Fostering self-esteem and responsibility.
- Developing leadership capabilities.

However, the educator must be prudent:

- Not to indulge in an excess of entertainment that dismisses real education.
- Not to allow students to lose focus on learning.
- Not to rely on predictable results.
- Not to deny negative emotions or outputs that may occur.

Through this wise approach, experiential learning can be applied to all subjects and disciplines, to all facets of life for all human beings, not only children but adults too.

Experiential learning can be implemented:

- At the individual level,
- And also at the collective level: team work.

Both are obviously complementary.

Experiential learning does not discard the teacher's presentation/ lecture method.

Experience-based education suggests that the educational process should not be reduced to lectures only.

- The teacher can and must certainly teach –provide students with basic concepts and facts, which is not necessarily a monologue since it can also be Socratic-.
- In any case, the teacher should allow the students to do, experience and create by themselves too –which again does not discard the teacher's role, since he or she will not vanish but will guide the learning experience-.
- With the teacher's guidance through the learning experience the educational process will be more relational and dialectical, more Socratic and cooperative –even the direct teaching can be more Socratic-.

Methods for Hands-On Learning –varying according to subjects or areas-:

- Instead of passive listening to the teacher, students do research by themselves and afterwards a presentation –written or oral, individual or collective-.
- Experimental methods in laboratory.
- Direct observation of Nature and natural phenomena.
- Interaction with the community/ participation in social life.
- Making something, essays, projects, case study, problem-solving, etc.

4. Self-learning strategies/ self-directed learning.

Education is child's responsibility.

Then the child must take his/ her responsibility.

Which means that the adult/ educator must offer self-learning opportunities.

According to M. Montessori, children internally know what is important to them and what they need to do, so they can choose their own activities. Then children will feel that they have to learn and what, and will work and educate themselves.

Post-modern societies have created **a false dichotomy between:**

- Teacher-directed learning
- And self-directed learning.

As **J. Dewey** emphasized, genuine self-learning constitutes **a middle path in front of this false dualism:**

- The educational process must be self-directed to some extent –not in absolute terms either-,
- While the teacher's role does not vanish but finds its fulfilment.

Then, what is the role of the adult/ educator?

- The teacher is not a mere lecturer nor a judge,
- But a loving caring guide, helper, facilitator, mentor and friend: providing the child with these self-learning possibilities and self-teaching materials -sometimes incorporating play-way methods too-.

The teacher follows, observes and accompanies the child; above all, the educator must believe in the child.

The role of the child himself.

- Every child becomes more active in his/ her own educational process –in ways suitable to the age-group- following his/ her own natural inner guidance.
- Mixing children from different age-groups is highly educational for both the elder and the younger –it was normally practised by the Indian Gurukula, the Buddhist Sangha or indigenous tribes-.
- Elder or more experienced children can act as assistants to teachers and monitors to their mates.

The stages of a self-learning experience:

- Forethought: goals and strategies are defined while designing a learning plan –not the teacher alone but in collaboration with the learner-.
- Performance: engaging through self-learning activities; the learner acts by himself under the assistance of the adult –who does not simply vanish but guides and motivates-.
- Reflection: self-evaluation under the teacher's supervision; both the learner and the educator assess the self-learning experience, evaluating the results and examining the whole process in order to continue the learning process.

Self-learning and play-way methods.

- Since playing corresponds to the very nature of the child –in different ways according to the age-groups-,
- Self-learning strategies must incorporate play-way methods –adequate to the age-groups-.

Self-learning can also involve –in ways suitable to the age-groups-:

- Direct experience
- Life tasks
- Problem solving/ case study
- Projects, etc.

M. Montessori arranged self-teaching materials into five groups:

Practical life./ Sensorial./ Mathematics./ Language./ Cultural subjects.

The features of a self-learning experience:

- To motivate the student.
- To enhance his/ her autonomy and maturity.
- To strengthen his/ her talents and skills.
- To unfold internal incentives/ passion for learning/ curiosity/ imagination/ creativity.
- To adapt the self-learning experience to the nature and vocation of each student.

Self-learning is inseparable from experience-based and child-centred education, which constitute but different facets of the same integral or holistic philosophy of education, which will also be value-based since it cannot get rid of values as an essential part of the whole educational process.

- First of all, self-learning will be experience-based by definition, since the learner will make his/ her own experience through the self-learning process.
- Needless to say, some learners will require more supervision and some less, and not always in the same way;

Which means that self-learning will always be child-centred from the point of view of the adult's guidance, watchful of the student's characteristics, inclinations and talents.

5. A child-centred pedagogy.

Teacher-centred.

Standardized teaching
Adults decide everything
Rationalism/ scientism/ mechanism

Monologue from teacher to student
Lowest communication
Passive students
Mechanical/ robotic learning
Bookish learning
Learning = abstract/ artificial
Teaching = giving answers
Separate subjects
learning only
Information-based
Curriculum-based

Teacher as lecturer/ judge
Only student viewed as learner
Assessment = academic/ external
Mechanical scored assessment
Evaluation monitors learning
External/ coercive discipline

Valueless utilitarianism
Individualism/ competitiveness
Strictly academic instruction
Teaching a student
Informative instruction

Child-centred.

Personalized attention/ care
Students take ownership
Multiple intelligences

Student self-learning
Relation/ (Socratic) dialogue
Active students
Creative learning
Experiential learning
Learning = concrete/ real life
Teaching = raising questions (by students)
Transdisciplinary/ interdisciplinary Class
Learning anytime/ anywhere
Competency-based: skills
Student-based: potential/ talents/ vocation

Teacher as guide/ facilitator/ mentor
Learning as a life process (adults too)
Global assessment with student himself
Creative assessment
Evaluation stimulates/ guides learning
Internal/ self-discipline

Value-based education
Relation/ dialogue/ community
Holistic/ integral education
Educating a human being
Transformative education

- **A child-centred pedagogy implies self-learning and experiential learning; these are the three inseparable features of integral education.**

Mainstream schooling.

- The teacher knows everything in front of students who do not know anything.
- The teacher does all of the work in front of passive –bored- students.
- The teacher imposes itself upon students: even if students participate, he/ she will interrupt, correct, finish.
- The teacher is ultimately a judge giving marks and judging behaviour.

Child-centred education with self-learning/ experiential learning.

- Motivates students and helps them to know themselves: their own skills, talents and vocation.
- Engages students in constructing their own knowledge and the very knowledge of themselves –till the deepest inner Being-.
- Regards students as active participants in their own learning process.
- Encourages students to research and create by themselves while also expressing themselves: learn how to learn + creative/ critical thinking.
- Helps them to reach informed opinions and share/ communicate them.
- Is strongly project-based with all sorts of tasks perfumed by students themselves: case-study, problem-solving, decision-making, commentaries, dissertations, oral presentations, various forms of projects, etc.
- Gives different rotating roles to students: information selector, researcher, illustrator, summariser, culture connector, dialogue coordinator, value-stimulator, etc.
- With peer-teaching: students as assistants to teachers/ monitors to their mates.
- And collaborative/ team work –without dismissing personal effort-.
- Ultimately promotes respect, trust and affection among students –instead of bullying- and between students and teachers together with a sense of cooperation and community.
- The teacher helps students to access information, interpret, understand, organize and use knowledge to solve problems or create something by their own.
- He / she considers the views of students, takes their needs into account, and makes them feel included.
- This kind of integral education also involves the parents and the community: systemic approach; the ways can vary according to the context and situation.

6. Value-based education and ethics.

Integral education is not only child-centred with self-learning and experiential learning. It is also value-based, since values are inherent to the holistic nature of the child or human being.

However, this matter requires a clarification that is especially important for educators trained in mainstream scholarship.

- **The predominant scholarly discourse in the modern world** regards values from a materialistic point of view in intellectual, ethical, aesthetic and emotional terms. Even when spirituality is acknowledged, it is understood within the framework of conventional faith and orthodox religion. In the prevailing liberal ideology values are seen as **subjective**, although it can be accepted that there are some common assumptions in social life. In the modern mindset, subjectivism is the corollary of **relativism**: values would be relative in geographical and historical terms. Basically, values are human or cultural constructs changing through time and space; therefore, they are subjective and relative –in spite of social contract with its standard values-.
- **In the educational philosophy of spiritual masters of India such as Swami Vivekananda, Sri Aurobindo or Sri Sathya Sai Baba**, human values lie within all human beings; hence they are universal, transcending distinctions of race, culture, religion, history, etc. That is why values such as love or peace are present in the teachings of spiritual masters and holy books from all spiritual traditions: Hinduism, Buddhism, Christianity, Islam, Judaism, Taoism, etc. This kind of Philosophical Idealism experiences a cosmic consciousness and an underlying oneness. From this world view, the fundamental human values are **not subjective nor relative but objective and universal**; they are inherent to humanity and to reality. Human values have a cosmic and divine dimension.

Of course, Philosophical Idealism would acknowledge that some values may be subjective and relative, being the product of the human mind and culture. But the spiritual masters of India unveil deeper dimensions of reality not taken into account by the materialism and utilitarianism typical of the modern age. There are **fundamental human values** –such as love or peace- that are universal and cosmic –ultimately divine- since their origin is not the most superficial mind but the deepest strata of consciousness –which are not individual but universal or cosmic-. These fundamental values have **an ontological texture**; they are inherent to the very divine nature of humanity. What can certainly be relative is the **cultural expression** of the values.

From this Idealistic/ mystical perspective, ethics incorporates a metaphysical dimension, and only this deeper ontological nature of ethics can really form the moral emancipated subject that was the dream of Kant and Enlightenment.

These fundamental human values can only be unfolded through some kind of inner work, meditation, etc. They do not belong to the most superficial mind; we must go within and unveil them from that depth inside us.

This is called “e-ducere” in Latin/ “bala vikas” in Sanskrit: to elicit from within; to bring out the true nature of humanity from within. The fundamental human values such as love or compassion naturally arise through this “sadhana” -process of self-realization-, which means nothing else than coming back home, manifesting the dormant potential of the human being that was already there.

According to Sathya Sai Baba, education must be integral or holistic and child-centred, with self-learning and experiential learning; at the same time, it must be value-based. Education means education in human values; it is an education for consciousness that unveils the deepest potential of the child: “e-ducere”/ “bala vikas”.

From this kind of perennial Philosophical Idealism, **Sathya Sai Baba makes a simple yet profound pedagogic proposal.**

The fundamental human values can be put into practice through **a pedagogic process that is:**

- Integral
- Experiential
- And transformative.

This value-based pedagogy can be implemented through complementary **teaching techniques:**

- Prayers/ quotations
- Story-telling
- Group singing
- Group activities (from drama to social service)
- And silent-sitting/ meditation.

There must be a **direct teaching** of human values in the class-room.

However, the value-based perspective must also be incorporated into the **academic subjects** and the **artistic disciplines** –that may become powerful tools of value-based education-.

Finally, human values should permeate **the whole life and ethos of the school.**

7. The Socratic Dialogue or Method. (See the Upanishads too.)

“I cannot teach anybody anything. I can only make him think.” Socrates.

This basic Socratic statement has been totally misunderstood in the modern world. Socrates –and Plato- had in mind **two levels of reality or consciousness**, but mainstream culture and even scholarship have stayed at the first level only due to the materialistic bias of modern civilization.

There are two stages in the Socratic inquiry and dialogue:

- **The cognitive stage** of inquiry: to think by oneself –critically- at the intellectual level and to know oneself at the common –superficial- levels of the personality.
 - But many today forget that Socrates –and Plato- were not heirs of modern materialism; for them there was a second deeper stage of inquiry at a **meta-physical level**: self-realization and awareness in a cosmic/ mystical plane.
- “Know yourself and you will know the universe and the Gods.”

In both stages, **how does Socratic Dialogue work?** (After the Socratic legacy, some modern philosophers, such as Buber, Panikkar or Krishnamurti, have cast light upon the fundamental matter of dialogue.)

- Instead of giving answers –as most teachers do- you ask questions. At the same time you allow the other person –student- to really ask questions too.
- You are active but your interlocutor must be active too, not passive.
- You engage others in critical questioning of their own bias and social bias, but you must be ready to do so yourself too; you must be the first example.
- You do not give to others –and students- a set of finalized truths; they must search by themselves, and truth will come out through the dialogue.
- You do not impose your point of view to others, even if you are convinced that it is right –even if it is really so-; they must realize by themselves.
- When there is true dialogue, both really listen to each other, to what the other person has to say -what is his vision, what is his background- with respect and empathy; otherwise there is discussion and confrontation, but not dialogue.
- Then, you must be really open to modify your previous views because you learn something from the other person; otherwise you are a fanatic or just narrow-minded. Dialogue is at the antipodes of dogmatism.
- The open empathic mindset of dialogue is imbued with love and compassion; it is a state of consciousness.
- This unconditional love for all will forgive even stupidity, even fanaticism.

- Real Socratic Dialogue might be uncomfortable and subversive, because it will question everything, all prejudice and assumption to go to the very roots of the issue and to unfold the deepest truth. It is critical thinking in earnest.
- True dialogue does not seek power, money, fame, but truth/ understanding. It is not meant for the glorification of the ego, but for the glory of the soul. Socratic dialogue does not look for verbal victory but the victory of truth.

Eristic is a sophistic utilization of apparent –false- logical contradictions. This is not an honest search for truth. Socratic dialogue has nothing to do with this.

Protreptic is an exhortation that tries to persuade.

The Socratic teacher does not impose, nor does he persuade; he only suggests.

Wisdom is an invitation only; the others are free to take it –or not-.

Sophistry in general lies at the antipodes of Socratic Dialogue.

Sophistry can use many fallacies; Socrates seeks the truth only.

Sophistry may become a business; Socrates teaches out of love for humanity.

Sophistry is at the service of the ego; Socratic dialogue serves the soul.

Our world is full of Sophists, just as Athens. Today Socratic Dialogue is as rare as it was in Athens. As we said above, Buber, Panikkar or Krishnaurti have given deep insights into the issue of dialogue; but they have been widely ignored just as Socrates or Plato have been culturally forgotten.

Genuine integral, child-centred education lies upon Socratic Dialogue.

Many educators have just missed the main point. The foundation of integral child-centred education is not about class-room arrangement or pedagogic materials/ techniques; the foundation lies in the intention, in the state of mind: the Socratic mindset that delves into the mystery of the soul.

- Even in the most horrible mainstream class-room a Socratic teacher will be able to practise integral child-centred education to some extent.
- Without the Socratic spirit, all the self-learning materials, experiential strategies and new class-rooms will be totally void and will recreate the old paradigm with a more cheerful face –as it is done too often-.

Thinking by oneself has become a cliché; everybody will pretend it. But if you examine things in depth, you will realize how people are conditioned –more than ever-.

Socratic Dialogue is a real challenge.

8. The Indian Gurukula and meditation for modern schools.

As Patanjali stresses in the Yoga Sutras, yoga is nothing else than meditation.

Then, what is meditation?

- It is not a set of techniques, that can be utilized but will always be merely instrumental.
- It is basically a state of (higher) consciousness unfolding from within.

The next question would be: **How do we reach those higher states of consciousness?**

- Though they sometimes manifest in some individuals in spontaneous ways,
- There are paths of inner work and techniques that will help.

There are manifold paths of inner work and techniques, but **some basic features would be common to any genuine process of meditation leading to the meditative state.**

- Many spiritual masters in India have underlined the royal path to go within: following the breathing.
- It can be twinned to a simple process of relaxation.
- If thoughts come in we just observe them, as we witness all what happens without sticking to it; watch and let it go.
- Many spiritual masters have also recommended the repetition of a mantra –or a divine name- as a central tool to shift from the average mind to other levels of consciousness.
- Another possibility is to focus the mind on some holy image (or a whole process of visualization).
- All spiritual traditions have emphasized the visualization of the (inner) light.
- Some schools or masters recommend to send this light to others and ultimately to all and to the entire universe –cosmic solidarity/ unconditional love-.
- We must always close the session as we started by following the breathing.
- It is important to finalize it by being again aware of our body here and now.
- The guidance of a genuine master is fundamental: the Indian Gurukula, the house of the master, the master with his disciples.

Since this is something very real and fundamental for the future of humanity, it can neither be overlooked nor taken easily.

Educators must rely on consolidated traditions and schools of inner work, and those who guide the meditative process must have enough experience and maturity.

All spiritual traditions have their own paths of meditation –not only Hinduism or Buddhism, but also Christianity or Islam/ Sufism-.

There are modern adaptations that have been serious, profound and very effective, such as Mindfulness launched by J. Kabat-Zinn or Sophrology designed by A. Caycedo.

Some Indian traditional paths have become very well-known in the Western World; for instance, Transcendental Meditation taught by Maharishi Mahesh Yogi or Meditation in the Light instructed by Sri Sathya Sai Baba.

If properly comprehended, the Indian tradition of Yoga constitutes a gold mine for humanity to unfold the inner dimension in depth.

9. From neuroscience to wisdom; technocracy and humanism.

- There has been a fashion in the last decades about **educational neuroscience**, falling into **the technocratic mirage** –once more- presuming that “science” has the key to the human condition and reality, and hence education.
- **Quantum physicists** have turned their attention to the traditions of spiritual philosophy and wisdom, and have concluded that **consciousness is the key**.

As both Indian and Greek culture emphasized: **philosophy** is more important than science, because (true) philosophy precisely deals with the secret of consciousness, which goes beyond the frontiers of proper science.

- **Aesthetic and spiritual neuroscience** have produced enthralling research that manifests on scientific grounds the capital role of the arts –aesthetics- and spirituality/ meditation.
In fact, many neuroscientists from these fields of research have corroborated the conclusions of both quantum physicists and mystics.
- **Educational neuroscience** can also be helpful and valuable by showing what happens in the brain through the learning process –just as **spiritual neuroscience** observes what happens in meditation and **aesthetic neuroscience** describes what occurs through the aesthetic experience-.
- But spiritual neuroscience cannot tell us how to meditate or what is spirituality, and aesthetic neuroscience cannot tell us how to create artistically or what is art. Similarly, educational neuroscience cannot tell us how to educate or what is education. To pretend it is epistemologically false; it presumes an extrapolation that is not valid.

- First of all, serious neuroscientists warn that **the results of educational neuroscience can only be utilized through educational psychology and educational philosophy**. Neuroscience cannot overlook a whole discipline with scientific foundations such as educational psychology. It cannot invalidate either the issue of the world view and the role of educational philosophy; consciousness is the key, and consciousness cannot be reduced to the brain at all –as many quantum physicists and neuroscientists have stressed-.

Moreover, as **Kant** warned, education is a **historical process** based on the observation, experience and wisdom of many generations through centuries. **Montessori or Piaget's** invaluable contributions are based upon **empirical observation** –evidence-based- and are valid though prior to neuroscience.

- Neither neuroscience nor science can answer to the question: What is the purpose of education? Which values do we teach? These are philosophical issues, and it is a matter of conscience.
- Even “How we teach?” cannot get rid of psychology, philosophy and this Kantian concern for learning from history through practice and experience.
- Finally, any pedagogy lies upon a world view and a set of values –consciously or not- and this is not a scientific matter but a philosophical issue.

➤ **What can educational neuroscience tell us?**

- Neuroscience can tell us **how the brain works** –in a meditative state, in an aesthetic experience or in the ordinary learning process-.
- It can help **to debunk groundless fashions** such as “**learning styles**” –which is totally **different from** something much more serious, “**multiple intelligences**”-.
- Neuroscience has questioned another pedagogic ideology –**the global way of learning to read and write**- showing that **the traditional analytical method** was better. Even ministries of education fell into the mirage and ignored neuroscience.
- Ultimately, neuroscience can describe how the learning process occurs, which should be taken into account by the educational system. However, neuroscience will only confirm –scientifically- what was already observed by sensible educators through the pedagogic practice long time back.
- Mainstream schooling teaches children **to write and learn mathematical tables in kindergarten** when it is premature, when the brain is not ready yet for such abstractions. Children spend years struggling with it, and this pedagogic aberration produces more dyslexia than ever. Finally the brain catches up and it becomes easier. In both cases –alphabet and tables- the child is forced to learn something prematurely when the brain is not ready for that abstraction; the brain is forced to deal with something without intermediate steps, which creates barriers and blocks. From scans on the brain, **neuroscience** would suggest that it is better to teach writing and tables at the age of six to seven when the human growth is ready for it. Then, what other children in mainstream schools would take several years to learn, children at 6/ 7 pick up in several months because the brain is ready for those skills. By the way, **R. Steiner** knew all this very well and proposed it without any neuroscience yet.

- When children are forced to study for a long time, they are full up and cannot take anymore; neuroscience shows that this is very real. A sensible educational system must allow children **to stop and go out and play** from time to time.
- When we first learn something new, the information goes into the temporary memory; when we stop learning and go out and play, the brain starts organizing the materials from the temporary memory and puts them into the permanent. The real learning occurs not in the classroom but in the garden. **Neuroscience scans** will advise teachers not to pressurize children for too long but **respect the way how the brain works**. Again, this was realized by **some educators long time back**; neuroscience will only provide a modern scientific verification.
- When we make children follow **successive subjects through short periods without breaks** –as in mainstream schooling-, the materials from the previous period that are kept in the temporary memory are replaced by the information from the second period and erased, because there was no break to allow the passage from the temporary to the permanent memory -and so on through all the periods of the day-. That is why **ancient pedagogies** followed the same subject for longer periods of time while allowing prudent breaks and hence assimilation. This overload of information becomes even worse with the flickering screen of the **television**, changing images every few seconds, hyper-stimulating and hypnotizing the brain.
- Neuroscience confirms that **education must allow the child to I. absorb, II. assimilate, meditate on it, experience it, and then, III. re-express in its own way**. The educational system must give enough time to complete the loop and operate the whole process, which the mechanical succession of short periods without breaks will never allow. We must extend the duration of the class and bring in these three steps. Then, students can learn more efficiently in less real time; mainstream schooling wastes so much time in erasing layers of information.
- **Integral spiritually-based education constitutes the underlying paradigm for this kind of learning experience** suggested by educational neuroscience –and already practised by ancient pedagogies-. Through Philosophical Idealism, everything naturally falls into place. From the vision of the child as a soul in evolution, already having everything within, the educational process is seen as unfolding from within; then the three steps of the learning experience emerge spontaneously and can be easily implemented in the school.
- **Ultimately, what is the foundation for the educational process?** Neuroscience or educational philosophy, science or philosophy? Here we dare to say that the foundation for integral education -or just education- will never be science but philosophy. This constitutes the major challenge for the present technocratic civilization: to shift from scientism to humanism –within which genuine science will always keep its role, but not more than its proper role-.
- **In conclusion**, neuroscience cannot get rid of the philosophical foundation or the psychological dimension of education, and needless to say, it can never replace the real pedagogic experience –with the whole historical background, accumulated experience and treasures of wisdom-. **Technocracy has discarded conscience and buried wisdom. Here we make a philosophical proposal from technocracy to a new humanism.**
This has nothing to do with science; it is an ethical decision –being aware that technocracy is an ideology, a nefarious and fallacious ideology that has fed all the evils of this world while alienating humanity more than ever-.

Part II.

The Theory.

Section V.

Quantum education and paradigm shift.

Integral education, quantum physics and the new holistic paradigm.

Introduction.

A lot has been written about quantum physics, new science and the new holistic paradigm, and as it would happen for any subject some clichés have been established at the popular level that do not present enough accuracy. At the same time, these new disciplines or rather the world view unveiled by them have been attacked by the prevailing materialistic statu quo hostile to many uncomfortable discoveries of quantum physics and even more irritated by its philosophical conclusions, especially when they openly converge with spiritual philosophy. This hostility has obviously not prevented the capitalistic system from making big business through the practical application of quantum physics, which is much more important than many people would imagine.

Probably few have grasped the real significance and the historical importance of quantum physics and new science, precisely because it implies a paradigm shift, as it happened in Renaissance with the transition from the Middle Ages to the modern world. This paper is not about pure physics, but rather about the philosophical implications of quantum physics, which exist and are –we believe- fundamental for the future of civilization. This is certainly a paper of philosophy of science that tries to outline not only the philosophical implications of quantum physics but more precisely the paradigm shift that it does represent. Here, there are two aspects to be underlined.

First, it is not the author of this article who stresses the historical convergence between quantum physics and spiritual philosophy, but it is the major figures of quantum physics who have said it quite clearly.¹ This convergence has tremendous epistemological implications. Not only it reminds narrow-minded scholars and scientists that there is only one reality –the same for scientists and mystics- but also that there is a unity of knowledge sharply overlooked by the extreme fragmentation of scholarship in the modern world. This underlying unity of knowledge may evolve new connections between consciousness and technology unbelievable for the modern fragmentation.

As it was stated in the scholarly symposium held in Mumbai (Bombay) in 1983 gathering leading scientists and thinkers:

“In the meeting of Spirituality and Science lies the hope of reaching the ultimate goal of human quest of knowledge and truth, and the Reality pertaining to life and Creation.”²

¹ Cf, for instance, Russell P., 2003, p 103-129, writings of a scientist, Cambridge scholar.

² Sathya Sai Trust, 1995, p 28.

Secondly, this paper tries to show that the new emerging paradigm puts forward a new kind of education –obviously-. Education is a mirror of civilization. If there is a paradigm shift, there will be an educational shift. Just as modern mainstream schooling was the educational system of the age of Industrial Revolution and capitalistic expansion, integral education will be the pedagogy of the new holistic paradigm. This will be an education of the whole human being, an education of consciousness far beyond the merely cognitive/ intellectual inputs of mainstream schooling.

Integral education has not always been respected; quite often even not understood. The visible esoteric dimension of Steiner’s educational philosophy has not helped in front of the prevailing prejudice and hostility. Integral education needs an epistemology and a scientific foundation –together with a psychology of education and a philosophy of education-. This paper brings a humble contribution in this direction, hoping that the interest of some readers will be awoken to pursue research, reflection and educational practice in this horizon.

The renowned philosopher of science, E. Laszlo, warns us:

“There are stringent requirements for any new paradigm. A theory based on it must enable scientists to explain all the findings covered by the previous theory, and must also explain the anomalous observations. It must integrate all the relevant facts in a simpler yet more encompassing and powerful concept.”³

This “more encompassing and powerful concept” has been under elaboration and development through the last decades and is still going on. The paradigm shift is in motion, it is not over. This paper makes it clear that any paradigm has its own pedagogic translation. If modern mainstream schooling was the pedagogy of the age of mechanism and Industrial Revolution, integral value education -as an education for consciousness- will be the educational philosophy of the new emerging paradigm. Still, we must be aware of Laszlo’s warning, which means that the new educational system must be able to integrate the findings and inputs of the previous pedagogy with the anomalous observations and the new findings and the new inputs. This wider and deeper integration is what we have tried to elaborate in our educational project, “International Education for a New World. In this paper we offer a brief philosophy of science for integral value education, or to put it in other words, an epistemological foundation for holistic education.

In the last part of E. Laszlo’s “Science and the Reenchantment of the Cosmos”, a co-author, E. Sahtouris, gives a meaningful title to one of the chapters: “From a Mechanistic and Competitive to a Reenchanted and Co-Evolving Cosmos”. Many are unaware of the intimate relationship between the mainstream school system and the present model of civilization. If the modern paradigm has been mechanistic and competitive as this well-known book recalls, it is obvious that mainstream education has

³ Laszlo E., 2004, p 17.

Cf also Laszlo E., 2006, Part Three: The Re-Union of Science and Spirituality.

nurtured this mechanistic and competitive kind of society; how this has happened is something that we can study in depth and expound in detail through scholarly research. Similarly, the new emerging paradigm, “reenchanted” as Laszlo defines it, will inevitably unfold a new kind of education, certainly more holistic, humanistic and also spiritual. It is the main argument of this paper to suggest that what we know as integral value education constitutes the pedagogic translation of this “re-enchantment of the cosmos”, which, by the way, was the driving force of Romanticism and German Idealism with Hegel and Goethe at the front in conscious opposition to Newton and Adam Smith.⁴

Towards the new holistic paradigm.

Prof. Anton Zeilinger, Director of the Institute for Quantum Optics and Information (University of Vienna) has stated that: Quantum physics opens a totally new world view - when compared to the modern materialistic paradigm produced by an extrapolation from Newtonian physics-. All the major figures of quantum/ physics and new science have been convinced of this same fundamental point.⁵

In this paper, we try to show the profound coherence between integral value-based education and the new holistic paradigm, which provides the epistemological foundation for this kind of pedagogy. Or to put it in a reverse order, integral value education constitutes the pedagogy of the new holistic paradigm, just as modern mainstream schooling was the pedagogy of the materialistic mechanistic paradigm of the Age of Industrial Revolution.

Before examining in more detail the new insights of quantum physics and new science opening the door to a new quantum/ holistic paradigm coherent with spiritual philosophy and wisdom, **let us clarify some fundamental issues to avoid any misunderstanding.**

The advocates of the old mechanistic frame stress that all the disturbing discoveries of quantum physics are related to the microscopic level only, while at the macroscopic level mechanistic physics is still valid. This is partly true, and it is obvious that mechanistic physics has its own scope and role to play; in particular, it helps to make machines.

But what we cannot accept anymore is that this kind of mechanistic physics goes out of its natural boundaries and becomes a world vision. What is a fallacy is not mechanistic physics as such, but its extrapolation to everything – included life and human society- and its conversion into a paradigm.

⁴ Cf Sahtouris E., in Laszlo E., 2006, p 101-108.

⁵ Cf for instance Laszlo E., 2006, with the sub-title: “The Rise of the Integral Vision of Reality”.

This historical extrapolation was produced by Industrial Revolution, capitalistic expansion and the modern state.

Even if the provoking principles of quantum physics apply to the microscopic level, we should not forget that this constitutes the very foundation of the macroscopic level.

Moreover, the portion of the macroscopic cosmos to which mechanistic physics applies is only 4% of the universe; the rest is made of energy and dark matter, and here, the functioning seems to me more quantum too.

In addition, it is not true that the new concepts of quantum physics are related to the subatomic level only. There is a whole branch of astrophysics with scientists such as Michio Kaku that understands the cosmos as a multidimensional holographic multiverse that is more quantum than mechanistic.

Bohm's Implicate Order, Laszlo's Akashic Fields, Talbot's Holographic Universe, Kaku's Multiverse, Pauli and Jung's Synchronicity, Haisch's God Theory, Capra's Tao of Physics, Relational Theory, Sheldrake's Morphic Fields, the Gaia Studies, etc, suggest a quantum cosmos far beyond the subatomic realm.

Moreover, the latest research of quantum physics already outlines the bridge from the micro to the macroscopic level: from Strings/ M. Theory to the quantum field/ vacuum and the bioelectromagnetic field unifying energy and consciousness/ physis and psyche.

Even the human brain is now considered by the latest developments of neuroscience as a quantum medium, not a machine. Photons emission is also quantum in nature.

Finally, quantum physics has opened new avenues of technological application, from quantum medicine to quantum computers; this is only the beginning of a new quantum technology and science.

There is a whole spectrum of new science together with quantum physics: other fields of new physics and astrophysics, and still other disciplines such as relational theory, spiritual/ aesthetic neuroscience, new biology, Gaia studies, epigenetics, the mind's new science, sophrology, Jungian psychiatry and transpersonal psychology, etc.

The whole vast and fascinating spectrum of new science, not only quantum physics at the subatomic level, has concluded that reality or the cosmos is holistic, multidimensional and holographic, not the dead machine in the materialistic/ mechanistic vision of Newtonian physics.

Furthermore, in this new quantum reality consciousness is the key within an interdependent unity of psyche and physis –while physis is not the inert matter of the Newtonian age but a dynamic continuum of matter-energy inseparable from information, and hence consciousness-.

The unity of physis and psyche and the primacy of consciousness: from the Observer Effect to the intrinsic link between the spectrum of consciousness and the spectrum of the bioelectromagnetic field.

The perception of the phenomenon by consciousness; from the “phenomenon” to the “noumenon”: consciousness is the key.

These fundamental conclusions of the whole spectrum of new science open the door to a new cosmovision or world view, a new paradigm, essentially holistic, that is far beyond the mechanistic views.

All the main figures of new science –not only quantum physics- have agreed that the discoveries of new science unfold a new paradigm after realizing that the mechanistic world view was false as a world view; it can only be a specific field of research and technological application, not a world view. Here, in the paradigmatic extrapolation lies the fallacy.

It is clear today that the subatomic realm is not mechanistic, neither the cosmos as such –which is pure energy up to the 96% of its composition-, nor life, the human body, the brain, the psyche or human society.

In these fundamental conclusions and in the horizon of this new holistic paradigm, quantum physics and new science deeply converge with the traditions of mystical philosophy and wisdom and Philosophical Idealism. Again, the forerunners of quantum physics and new science have been aware of the historical confluence and have spoken about it.

It is precisely this new unity of science and spirituality that really unveils a new paradigm, that will be essentially relational and dialogical as well as holistic, multidimensional and holographic; to sum up in one word: quantum.

Let us follow now **the historical development of quantum physics, new physics and new science**, unveiling a new paradigm through the dialogue with spiritual philosophy and wisdom.

As **Stuart Hameroff** has pointed out, reality seems to be very strange, with **two sets of laws ruling the universe**.

* At the macroscopic level, from ants to stars, things can be understood according to the laws of Newtonian physics, and the 3 laws of motion seem to work.

* But, when we reach the level of atoms and the sub-atomic world, the Newtonian laws stop working, and a whole new group of laws emerges: quantum laws.

Classical physics regarded light as wave and the electron as particle. Heisenberg and Schroedinger showed that light exhibits properties of particles whereas the electron exhibits properties of waves. Quantum physics has evidenced that one particle can be in more than one place at the same time. This turns out to be astonishing for Newtonian science, but it seems to be as real as the fall of an apple from the tree. Einstein said that nothing can travel faster than light. But quantum physics has evinced that sub-atomic particles communicate instantaneously. Einstein still believed –like Newtonian physics- in the existence of an objective reality independent from the observer. Quantum physics concluded that any phenomenon is but an observed phenomenon, which means that there is no phenomenon independent from the observer. Moreover, the Newtonian kind of certainty –still cherished by Einstein- was replaced by quantum probabilities. Maybe that is why Einstein felt upset with the new quantum theory, for which he said that God does not play dice with the universe; Niels Bohr replied: - Stop telling God what he must do.

Newtonian physics was deterministic, pretending that we can determine the evolution of things from the established laws that rule matter. Quantum science is probabilistic; we can never know for sure the evolution of (microscopic) things.

Newtonian physics was reductionistic, reducing the vast and multi-dimensional nature of reality to a small part of it only, but still pretending that this reduction was the whole. Quantum science is holistic, acknowledging a multi-dimensional universe based on interdependence and again open to the mysterious, the ineffable and the sacred.

In fact, the last scientific developments put forward the limitations of human knowledge. As Dr J. Baker writes:

“String Theory, or rather theories, are still in a state of flux. No final theory has yet emerged.”

“A Theory of Everything is a goal of some physicists, who are generally reductionists and think that if you understand the building blocks then you can understand the whole world. (...) Other scientists find this whole attitude ridiculous.”⁶

⁶ Baker J., 2007, p 159.

Quantum physics has identified the most minute indivisible unit of electromagnetic energy: the quantum, as described by the **Quantum Theory through 5 main ideas**:

- Energy is not continuous, but comes in discrete units –quanta- that jump from one energetic state to another one through discontinuous quantum leaps.
- The elementary particles behave both like particles and like waves.
- The movement of these particles is inherently random.
- It is physically impossible to know both the position and the momentum of a particle at the same time.
- The sub-atomic world is nothing like the macroscopic world.

I. The mechanistic order was shaken when the advance in physics demonstrated that the apparently solid matter is in fact made of atoms that are inside mostly empty: vast regions where tiny particles move. Newtonian physics thought that atoms were solid – like snooker balls-. Quantum physics discovers **emptiness** at the level of atoms, the pillars of the physical universe, mostly void at the core of solid matter, even in a stone! Any Buddhist monk would kindly smile at the astonished face of the materialistic scientist: Shunyata.

II. The Newtonian pattern was even more deeply questioned when the new research in physics set forth that the sub-atomic particles have a **dual nature**, which means that they can be seen both as **particles and waves**. A mostly empty atom made of waves! At the subatomic level, matter does not exist with certainty at definite places, but rather shows tendencies to exist, and events show tendencies to occur. In quantum physics, these tendencies are formalized as probabilities and are associated with mathematical quantities that take the form of waves. Hence, particles can be seen as probability waves. In the quantum realm, there are only probabilities of finding any particle in a specific place. Any Vedantic sage would smile at the perplexed mechanistic scientist: the cosmic dance of Shiva.

III. If all this was not enough to break the classical rules of the “logical” and seemingly reasonable reality of mechanism at the macroscopic level, quantum physics discovered something even more puzzling: when the electrons move around the nucleus through different orbits, they do not travel through space and time as normal objects of the macroscopic level, but instantaneously and discontinuously through what has been called **quantum jumps**. Furthermore, scientists realized that it was not possible to determine when and how the electrons would jump –while determination was one of the pillars of the Newtonian paradigm-. At the most, scientists could calculate –as Schrodinger tried to do- probabilities about the movement of electrons. How far this quantum vision of reality from the mechanistic pattern, and how close to the vision of mystical philosophy!

IV. In front of the pretension to exactly measure everything, as postulated by mechanistic science, quantum physics has put forward **the principle of uncertainty**, especially through the work of **W. Heisenberg**, which irritated Einstein and most of mechanistic scientists. The Uncertainty Principle means that we cannot know at the same time the impulse of a particle and the exact value of its position.

“Thus, it is only “energy in action” which is at the base of all living organisms, giving rise to a boundless variety of structures and phenomena in the universe.”⁷

Especially important in quantum theory would be the **Particle/ Wave Duality**, which brings to the famous **Copenhagen Interpretation by Niels Bohr**. Sometimes a particle acts like a particle, sometimes like a wave. So, which is it? From Bohr’s point of view, the particle is what you measure it to be; when it looks like a particle, it is a particle. But when it looks like a wave, it is a wave. In conclusion, nothing is real unless it is observed, a crucial point where quantum physics meets mystical philosophy. Amazingly enough, the duality between particle and wave in quantum physics reminds us of the duality between Being and Becoming in mystical philosophy; the same reality can be seen as Being or Becoming, depending on how we observe it.

According to the Newtonian paradigm, there was a clear distinction between the observer and the object of observation, which means that we can know scientifically or just through the senses an objective world. Quantum physics has manifested through the scientific method that there is no separation between the observer and the object of observation, because we mould ourselves the world that we perceive, something that, once more, was already explained by the traditions of wisdom of mankind. This is known as the **Observer Effect**, which has become even more evident through the **Double Slit Experiment**.

When the scientist studies a particle, he is modifying it through the observation. Similarly, the human eyes do not see an objective world per se, but a specific world as it is presented and filtered by the structure of the eyes.

Recent psychosomatic studies and the analysis of stupefying cases of self-healing have proved how real can be our capacity to create our own reality, which certainly questions the vision of a mechanistic kind of medicine. It has been medically proved that negative thoughts promote illness, while positive ideas enhance health –until the capacity of healing oneself-. All this has been corroborated by **psychoneuroimmunology**.

⁷ Sathya Sai Trust, “Spirituality and Science. The Turn of the Tide in Scientific Thought”, symposium, Mumbai, India, 1995, p 111.

Even more enthralling, neuroscience has identified the “**mirror neurons**” that are activated both when an animal or human being acts and when it observes the same action performed by another. This kind of neurons mirror the action performed by the other as though the observer were itself performing the action. For instance, when we are contemplating a film it is as if we were ourselves there in the film living that story. The conclusion of this astounding discovery in neuroscience corroborates the Observer Effect of quantum physics, and consolidates -on scientific grounds- one of the major tenets of the new holistic paradigm already stated by Philosophical Idealism: there is no separation between the observer and the object of observation, between subject and object –whereas the typically modern epistemology was built upon a sharp separation that seems to be fallacious today.

Classical figures of quantum physics already emphasized the historical convergence between quantum physics and the traditions of spiritual philosophy and wisdom within the frame of a new holistic paradigm that will be fundamental for the future of humanity on Earth. According to the contemporary European physicist, Prof T. Versyp:

“This notion of a hidden dimension (in mysticism) would be parallel to the invisible matrix or implicate order that we have discussed (in quantum physics). (...) In all these metaphysical observations there is a fundamental truth of the uttermost importance.”⁸

The Double Slit Experiment shows that particles replicate the same pattern when we add a second slit through which they are shot, hence producing two bands on the screen instead of one. But waves behave in a different way when we add a second slit; instead of two bands they produce an interference pattern of many bands. What happens when we go to the quantum realm and we fire electrons –which seem to be tiny particles/ objects-? When shooting electrons through one slit they behave like particles producing one band on the screen. But when we shoot electrons through two slits we do not get two bands –as it happens with particles/ objects- but an interference pattern of many bands – as it happens with waves-. It turns out that tiny particles/ objects –electrons- behave like waves when we add the second slit. When we fire electrons one by one instead of all together, the same wave-like interference pattern appears after some time, which implies that the single electron behaving like a wave goes through both slits and interferes with itself. Still more enthralling: when we install a device to observe/ measure which slit the electron goes through, even through the two slits the electron behaves like a particle producing two bands instead of the interference pattern typical of waves, which means that the observer collapsed the wave function simply by observing.

⁸ Versyp T., 2007, p 106-108.

**The quantum dimension:
beyond the frontiers of Newtonian physics.⁹**

At the subatomic level, the components of matter and the forces that interrelate them constitute a net of relations or interconnectedness and a unified field. Interdependence lies at the very core of reality, something that coincides in depth with the traditions of spiritual philosophy and wisdom, which stated that things are connected rather than caused. This quantum world evolves beyond the common parameters of space-time characteristic of the macroscopic realm. The ordinary tri-dimensional world view and the classical laws of Newtonian physics collapse at the threshold of the quantum dimension –though they work at the level of senses-.

The quantum field works upon connections that are non-local. The famous experiment of Alain Aspect corroborates the non-local nature of the quantum net of interconnectedness, showing that both photons in the experiment instantaneously “know” what the other has done. Still more fascinating, the last developments of neurology suggest that the functioning of the brain is also non-local or quantum. The relation cause-effect is absent in this quantum non-local dynamism; this non-causality coincides with Jung’s concept of synchronicity. F. Capra has developed this aspect of the quantum field in his famous “Tao of Physics”.

The non-locality of the quantum field is closely related to another fundamental feature, its holographic nature, which means that every component already contains all the information of the whole. The quantum dimension is a cosmic hologram containing unlimited information within the energetic field itself. We know, for instance, that each cell of the human body contains a replica of the whole original DNA. Reality is holographic from particles to cells.

The principle of non-locality and the holographic nature of the quantum dimension put forward the multidimensional nature of humanity and reality, something that the traditions of spiritual philosophy and wisdom clearly understood, and lies at the very core of an integral form of education that mirrors the deeper quantum dimension of reality.

The traditions of holistic medicine have described the holographic pattern of energy of the human body, which we may call bioelectromagnetic, bioenergetic or subtle body, and which is parallel to the multidimensional spectrum of consciousness. We have examined these topics above, but we want to insist here that the holographic and multidimensional features of the quantum realm are present at three levels of reality: the human body, human consciousness and the cosmos, something astounding that manifests the underlying unity stressed by the traditions of spiritual philosophy and wisdom.

This historical convergence between new science and spirituality outlines a new paradigm beyond the limitations of the mechanistic and materialistic world view. In our educational project we try to elucidate the consequences for education, which unfolds all the depth of integral or holistic education.

⁹ Cf Sathya Sai Trust, “Spirituality and Science.The Turn of the Tide in Scientific Thought”, symposium, Mumbai , India, 1995.

The historical development of the new paradigm.¹⁰

We have followed in the previous pages the historical process through which the development of quantum physics and new science in dialogue with the traditions of mystical philosophy dismantles materialistic mechanism to its very roots and outlines a new holistic paradigm that is essentially multidimensional and spiritual.

The new paradigm reverses the modern materialistic fallacy at two levels:

- Not only the objective physical and the subjective psychic realm are not separated;
 - But in their essential interconnectedness what is primary is certainly the second one: the primacy of consciousness put forward by quantum physics, biocentrism and new science in deep coherence with the traditions of wisdom.
- The properties of matter have NOT an objective existence independent of observation and therefore the observer, that is, the psyche.

Hence, consciousness becomes the most crucial issue for the future of humanity on Earth. It also appears to be the very core of the educational process in a new holistic and value-based education as we defend here. Our paper tries to show that integral education is the pedagogy of the new holistic paradigm -evolved through the convergence of quantum physics/ new science and spiritual philosophy/ wisdom-. Both integral education and the holistic paradigm blend science and spirituality, and acknowledge the primacy of consciousness in a multidimensional cosmos where there is no separation between matter and mind.

Einstein's Relativity and quantum physics undermined fundamental tenets of mechanistic physics such as space, time, movement, matter, energy, locality, causality, determinism, and the whole nature of the cosmos. These tenets could work at some macroscopic level but not at other levels.

The new findings of quantum physics would become coherent with later research in the bio-sciences. R. Sheldrake's Morphic Resonance, for instance, would corroborate D. Bohm's Implicate Order and parallel theories such as the Akashic Fields and the holographic nature of the cosmos. Relational Theory, initially stemming from the bio-sciences, would continue to open the fascinating spectrum of new science.

In parallel to this revolution in the domain of physics –the very core of the modern mechanistic paradigm- and afterwards in the field of the bio-sciences, new developments in psychology introduced the issue of human consciousness into the scientific arena in terms that could not leave the prevailing materialistic views unquestioned.

¹⁰ Cf Capra F.: "The Tao of Physics", 1975,
"The Science of Leonardo", 2008,
"The Turning Point. Science, Society and the Rising Culture", 1983.

New disciplines such as epigenetics, sophrology, the Mind's New Science, etc, would endorse the revolution brought by Jungian and Transpersonal Psychology. The astonishing results of neuroscience, in particular the so-called aesthetic and spiritual neuroscience, would bring supplementary evidence to scientifically challenge the fallacies of materialism and support the major arguments of the new paradigm.

**The new paradigm in psychology:
From Freud to Jung and Transpersonal Psychology.**

S. Freud already shook modern culture by putting forward a psychological unconscious that could be deeply irritating to the bourgeois morality with all its sexual implications adequately buried by XIXth century Puritanism. But the main revolution in the psychological arena would be brought by CG. Jung, not by Freud. The unconscious as presented by Freud could be uncomfortable to the bourgeois prejudice, but it would never question the materialistic assumptions of modern civilization, whereas Jung's Collective Unconscious and Archetypes with their transpersonal implications and spiritual depth presupposed a psychic reality that did challenge the very roots of the materialistic understanding of humanity and reality.

Furthermore, Jung's Synchronicity, evolved in dialogue with the quantum physicist W. Pauli, evidenced that the deepest levels of the unconscious transcend the modern –false- distinction between psyche and matter, pointing at a deeper “implicate order” –called *Unus Mundus* by Jung and Pauli- strikingly akin to the subtle and causal realms of mystical philosophy. Later on, Transpersonal Psychology, with eminent figures such as K. Wilber, S. Grof, A. Maslow, R. Assagioli, etc, would further elucidate the new perspectives of Jungian psychology and deepen into their spiritual foundation and also into their pedagogic consequences –the main purpose of this book-.¹¹

After-death/ near-death experiences have always happened throughout history, but they have been scientifically recorded in the last decades; even more, new science has provided a theoretical frame to understand these experiences and also parallel phenomena: spontaneous mystical states and similar altered states of consciousness induced by psychedelics or hypnosis. The outstanding conclusion is that consciousness can exist without or beyond the brain –and hence matter-, which the mystical traditions of mankind had always suggested. In these higher states, consciousness manifests supra-empirical capacities open to other dimensions. In dreams as well as in meditation,

¹¹ Cf Grof S., “The Cosmic Game. Explorations of the Frontiers of Human Consciousness”, 1998, Maslow A., “Towards a Psychology of Being”, 1998, Wilber K., ed., “Quantum Questions. Mystical Writings of the World's Great Physicists”, 1987.

consciousness can visualize places that the waking mind had never seen, travel through space and visit other worlds or dimensions, and even forecast future events that the ordinary mind could never know. Meditation still unfolds a much deeper potential than dreams.

Can we deny the wonder and the primacy of consciousness far beyond the typically modern materialistic reductionism? The most lucid minds of the XXth century have realized that the advent of quantum physics and new science in dialogue with the traditions of spiritual philosophy has opened the door towards a new paradigm, that is radically different from the previous world view based on an extrapolation of Newtonian physics and which sustained the Industrial Revolution and capitalistic expansion.

From machines to thought. When science speaks the language of mysticism.

In 1935, Einstein and some of his colleagues at Princeton University tried to demonstrate that some tenets of quantum physics were logically unsustainable. Nevertheless, the XXth century has consolidated the main principles of quantum physics. Einstein wanted to prove that there is an objective reality independent from the observer or from any theory and which can be objectively and accurately described by the scientific method. The historical development of quantum physics has concluded that it is impossible to describe the properties of a system independently from the context and the process of observation. At the sub-atomic level, it is clear that the elementary particles do not exist as independent objects per se; they only exist in relation to the process of observing them. Any quantum event starts and ends through the process of observation; it does not exist without the very participation of the observer.

The new paradigm outlines a participatory cosmos from which we are not separated, where the observer is intimately intermingled with the object of observation, whereas the modern world view established a rigid –fallacious- separation between subject and object. This means that the new paradigm is based upon a dynamic binomial or an interdependent unity of physis –continuum matter/ energy- and psyche – information/ consciousness, where consciousness is the key –primacy of consciousness-, hence reversing the materialistic fallacy. The typically modern world view depicted a cosmos that was rigidly fixed and finalized once forever, whereas the quantum/ mystical paradigm unfolds from an unceasing dialogue between the subject and the object, from relations between all the parts of the whole in interconnectedness and interdependence. Mechanistic science illusively defined separate objects and overlooked the relation between them. Quantum physics has unveiled a reality made of relations rather than objects in a vision of dynamic interaction.¹²

¹² Cf Goswami A.: (1995), “The Self-Aware Universe”, 1995,
“Creative Evolution. A Physicist’s Resolution between Darwinism and Intelligent Design”, 2008,
“God is not Dead. What Quantum Physics Tells Us about our Origins and How We Should Live”, 2009,
“Physics of the Soul. The Quantum Book of Living, Dying, Reincarnation and Immortality”, 2001,
“The Visionary Window. A Quantum Physicist’s Guide to Enlightenment”, with D. Chopra, 2000.

Modern physics has described the universe as a machine. At the time of Newton the common metaphor was that of a clock, and more recently that of a computer. Even the human body and brain have been compared to machines. These modern metaphors and their mechanistic basis are suspiciously consistent with the world view of the Industrial Revolution and technocracy. However, the development of quantum physics has evidenced that the modern metaphors are inadequate, and their mechanistic foundation questionable.

With the emergence of quantum physics many physicists have realized that the universe is not a machine. For the new generation of scientists, the cosmos would be a living organism –Gaia- and also Thought/ Consciousness -rather than a clock or a computer, and hence a machine-. A number of physicists have concluded that consciousness is primary and the creative basis for the material world; metaphysically, this would be the masculine principle –Shiva-; Gaia would be the feminine –Shakti-. The views of quantum/ new physicists would be astonishingly coherent with the main tenets of the traditions of wisdom: a radical turnabout compared to the Newtonian age.

J.J. Kineman and K. Anil Kumar have worked together for this radical turnabout at the junction of the West and the East, between India and North America:

“Gregory Bateson professed that there is more to nature than can be described from the traditional mechanistic view; that to understand living nature we must think differently and escape the machine metaphor.”¹³

The astrophysicist J. Jeans advanced a non mechanical world view more than eighty years back, while he already dared to compare the cosmos to thought. In the same period, A. Eddington, another reputed physicist who worked out Einstein’s Theory of Relativity, would add that the real content of the universe is nothing else than our own consciousness. One of the most renowned fathers of quantum physics, Schroedinger, also suggested that the basis of reality cannot be found in matter but in consciousness. The conclusions of Jeans, Eddington and Schroedinger can be regarded as pure Vedanta, the prominent Indian philosophic school that never denied the reality of matter, but warned that the illusion consists of reducing everything to it, while the foundation of everything lies in consciousness –exactly what quantum physicists have also understood-.

Mechanistic science exclusively focused on matter from the perception of the physical senses. Quantum physics later discovered the subatomic realm below apparent matter and the senses, and through the Observer Effect, it asserted the primacy of consciousness. The new holistic paradigm confirmed the basal role of consciousness in dialogue with spiritual philosophy. The adventure of consciousness as Sri Aurobindo disclosed would require the same respect and attention than the material world seized by the physical senses. From here unfolds a new science of consciousness in a new holistic

Cf also Koenig M., “Das Urwort. Die Physik Gottes”, 2010.

¹³ Kineman, Anil Kumar, 2007, p 1055.

paradigm. This constitutes the epistemological foundation for integral value-based education.

Even Einstein sought for Truth, Goodness and Beauty –Satyam, Shivam, Sundaram in Sanskrit-, which he found in the lives and teachings of mystics and sages. He was truly convinced that at this level –mysticism, not organized religions or priestly hierarchies- there is a space for interaction between science and spirituality. According to Prof. Alois M. Haas, renowned Swiss Professor and expert on mysticism: Science already speaks the language of mysticism. Einstein himself had stated: Mysticism is the source of any true science.

Can the educational process continue to ignore all these developments stressing the primacy of consciousness? The mainstream school system has been the pedagogy of modern materialism, and hence, Newtonian physics, the Industrial Revolution and capitalistic expansion. That is why the prevailing school system has reduced the multidimensional nature of humanity to a rational mind overstressing science – mechanistic science-, and has reduced reality to matter and objects, while it has encouraged competition, the ego and boundless desires of things. The new paradigm summons a totally different pedagogy that is essentially multidimensional and holistic as the new paradigm itself. This new pedagogy can only be child-centred, acknowledging the multiplicity of geniuses and the uniqueness of every child or human being in a vision of underlying unity.

According to J.J. Kineman and K. Anil Kumar, one of the fathers of Relational Theory, G. Bateson, “minced no words in criticizing the Western contemporary education system for encouraging this myopia.”¹⁴

Travelling back to Earth on board of Apollo 14 after having walked on the Moon, the astronaut **Edgar Mitchell** had an experience that was not foreseen and that changed his world view for the rest of his life. As he approached our beautiful blue planet, he was filled with an inner deep conviction: that the Earth to which he was returning is part of a cosmic living system, harmonious and whole, and that we all participate in it, as he expressed it later, "in a universe of consciousness."

Trained as a scientist and astronaut, Dr Mitchell was educated in the frame of mechanistic science still prevailing in our world. Yet the return to Earth on Apollo 14 produced an unexpected turnabout, after which Captain Mitchell shared the basic assumptions of the new holistic paradigm, stressing that the key lies in consciousness. In spite of science's technological achievements, Dr Mitchell realized that mankind has barely begun to apprehend the deepest mystery of the universe: consciousness itself. He

¹⁴ Kineman J.J., Anil Kumar K., 2007, p 1066.

became convinced that this is the next frontier to explore, for which within two years of his expedition he founded the Institute of Noetic Sciences.

As the Catalan researcher, J. Pigem, stresses, modern materialism illusively identified things through a linear and dualistic kind of thinking, whereas quantum physics has discovered that the cosmos is in fact made of relations in interdependence within a participatory reality where the observer determines the object of observation. This unceasing flux of reality under the primacy of consciousness was clearly understood by the traditions of mystical philosophy, especially in India.¹⁵

From the previous developments about the new paradigm,
we can outline the common grounds underlying all the disciplines that converge as complementary forms of knowledge into the new holistic world view.

This may be the foundation for a unified theory of knowledge –which will be relational, dialogical, systemic, holistic and holographic-; it can also be regarded as the epistemological basis for integral value-based education.

- Truth = reality (Sat/ Satyam in Sanskrit) is relational; hence, the new paradigm evolves from the unceasing dialogue between complementary disciplines and aspects of reality. Complementarity is another crucial concept.
- Both the cosmos and humanity manifest a unity of physis and psyche –matter, energy and mind-. In this inherent interconnectedness and interdependence, consciousness is the key; however, consciousness is inseparable from vibration.
- Both the empirical world and higher strata of consciousness/ reality unveil the capital role of the Light, which constitutes the common stuff to which everything is ultimately reduced: physis and psyche, empirical and subtle, manifest and potential.
- Both reality and the knowledge of it ultimately stem from Love –another common stuff which the cosmos and consciousness are made of-.
- All human knowledge and experience ultimately unfold the awareness that: the I is We, and that We are That from which everything emanates.

¹⁵ Cf Pigem J., 2013, p 127-128 and 131.

From quantum science to quantum consciousness.

Although Descartes was a pioneer of modernity from a certain point of view, he emphasized the capital role of consciousness from another point of view, which is at the core of the new paradigm. His famous “Cogito ergo sum” –“I think, therefore I am”- reveals the foundational nature of consciousness, a mystery and an uncomfortable burden for mechanistic science, yet the key for the new paradigm. In the words of the contemporary physicist Prof. T. Versyp:

“Consciousness emerges from the world of quantum events. The understanding of ourselves and our relationship with others reflect the same laws that rule the quantum world.”¹⁶

On parallel lines E. Laszlo shows that consciousness works in ways that are not mechanistic but quantum and non-local.¹⁷ Transpersonal Psychology has extensively researched on this quantum dimension of consciousness already acknowledged by quantum physics.

The foundational role of consciousness has been asserted by a set of instances through the XXth century.

Quantum physics puzzled and irritated the advocates of materialism by confirming that the act of observation does impact upon the reality that is observed.

Further developments of quantum physics with D. Bohm and E. Laszlo suggested the existence of a cosmic ocean of energy inseparable from fields of information.

New biology -with R. Sheldrake- postulated the existence of these fields of information moulding living beings in the biological domain.

Epigenetics has proved that the DNA is not deterministically deciding our lives, since a change in our mental patterns can modify this biological determinism.

Sophrology has evidenced how a constructive psychological therapy can positively affect not only mental health but even the human body.

Psychosomatic studies have demonstrated that the state of mind does have significant effects on the person's health and ability to heal itself.

The PEAR/ ICRL research (Princeton University) has empirically verified that the mind does alter the functioning and outputs of various machines.

Last but not least, spiritual neuroscience has produced scientific data showing that the spiritual experience not only exists but even influences the whole organism.

¹⁶ Versyp T., 2007, p 26.

¹⁷ Laszlo E., 2004, p 90-105, and Laszlo E., 2006, p 121-129.

In the new emerging paradigm, consciousness cannot be reduced to matter –to neurological processes-; it becomes a fundamental component of reality within a profound unity of physis and psyche –matter, energy and consciousness-; at the same time, it is also regarded as the key due to its foundational role: everything we know manifests from consciousness.

Various scientific findings confirm this foundational role of consciousness.¹⁸

The prevailing materialistic world view has operated a confusion between the reality as such and the reality as perceived by the mind. This confusion corresponds to the Vedantic idea of “maya” –illusion or delusion-. The illusion/ delusion consists of thinking that we perceive the world directly as it is. Today we know that the human eye is sensitive only to the light of a narrow frequency range from 430 000 to 750 000 gigahertz; at lower frequencies we find infrared radiation, at higher frequencies ultraviolet rays, and beyond them X and gamma rays. We also know that many animals have access to other bands of the electromagnetic spectrum, which means that they perceive a world pretty different from our perception. For example: with their sonar, dolphins have a perception of things more similar to that of the ultrasound scan. In conclusion, one thing is reality as such –Kant’s “noumenon”-, another thing is what we experience, the reconstruction of reality by our perception –Kant’s “phenomenon”-. At the level of the phenomenon, consciousness appears to play a foundational role. As we said, everything we know manifests from consciousness.

The new holistic paradigm unveils the “maya” –illusion/ delusion- of modern materialism or common assumptions, and opens the scientific arena and human knowledge to a wider, richer and more accurate vision of reality. In the materialistic world view, only the material realm was acknowledged, and the mind was reduced to matter –to neurological processes-. In the new holistic paradigm, consciousness is an essential component of reality within the fundamental unity of physis and psyche –as we develop below-.

In this fundamental unity the key lies in consciousness, since the ordinary mind does not know the “noumenon” but the “phenomenon”, something that is scientifically evident today, while the mystical experience –scientifically studied by neurology- manifests an aperture of consciousness exposing the mind to other “phenomena” of the “noumenon” that were already existing though they were overlooked by the gross mind –like many areas of the electromagnetic spectrum-.

Therefore, in the new paradigm consciousness appears to be multidimensional and holographic, much vaster and deeper than the flat monolithic reduction of materialism. This has been the conclusion of a major psychiatrist, Dr S. Grof; according to him, the common perception is limited by the physical senses, whereas in transpersonal states of consciousness, either meditative or induced by LSD, those limitations vanish and the

¹⁸ Cf Rubia F.J., 2015, and Walach H., ed., 2011.

mind perceives a range of phenomena unknown to the ordinary mind, which means that transpersonal consciousness opens itself to the multidimensional and holographic nature of reality. In its multidimensional and holographic nature, consciousness is inseparable from the physis or cosmos, from the binomial matter/ energy. Both psyche and physis are holographic and multidimensional and constitute One reality beyond the limitations of the ordinary mind and the physical senses.

What we have presented above is also related to the issue of **the two brain hemispheres –left and right-**. We have already stressed that the modern materialistic world view overemphasized the left hemisphere to the detriment of the right in its general policy of alienation of the human being. The new paradigm and its crucial reappraisal of consciousness will foster the harmony between the left and the right hemispheres, with a balanced interconnected development of both –this is the task of integral education as defended in this book-. The harmony between the two brain hemispheres will nurture a richer and deeper psyche and higher states of consciousness, and hence, more holistic human beings living in harmony with the cosmos.

**At the junction of deep psychology and quantum physics.
The unity of physis and psyche in a multidimensional reality.¹⁹**

The quantum physicist W. Pauli, who worked out the concept of Synchronicity with C.G. Jung, emphasized the “complementarity” of psyche and physis, consciousness and matter, as twin aspects of the same holistic reality in an integral world view. In fact, complementarity would apply to other fundamental notions of the holistic paradigm. Seemingly mutually exclusive pairs of concepts must be used to characterize quantum or holistic phenomena in all their aspects in a multidimensional reality. At the same time, Jung warned that any conceptual formulation that tries to apprehend the deepest levels of this multidimensional cosmos will be imperfect, and hence metaphoric or symbolic –not literal-.

Quantum physics has proved that any defined universe is an observed universe; the properties of particles depend on the observer: the Observer Effect. So, it is true that we create the world. However, quantum physics has also shown that the Unified Field generates everything, so we are also created by the world. The relation between the world and ourselves is dialectical. Reality is essentially dialectical.

¹⁹ Cf the classic of G. Bateson, “Mind and Nature. A Necessary Unity”, 2009,

and the classic of R. Rosen, “Life Itself. A Comprehensive Inquiry into the Nature, Origin and Fabrication of Life”, 1991.

Parallel binomials for the complementarity of psyche and physis.

- In physics: the wave/ particle duality;
- In psychology: the unconscious/ conscious duality.

The parallelism between physics and psychology would be striking, strongly suggesting the integral nature of reality.

- The wave is the unobserved aspect of physis, just as the unconscious is the unobserved aspect of psyche;
- The particle is the observed aspect of physis, just as the conscious is the observed aspect of psyche.
- The wave function represents probabilities in contrast to the actualized particle;
- Similarly, the archetypes of the unconscious represent psychic potentialities while the conscious mind is an actualization of these potentialities.

This comparison between structures in physics and psychology evidences the most crucial point of the new holistic paradigm: the interconnected unity of physis and psyche -matter, energy and mind-, the two or three of them constituting inseparable aspects of the same One reality. (Einstein already understood that matter is but a form of energy.)

This profound truth shakes the biases and fallacies of modern materialism, but it was well known by the traditions of spiritual philosophy. In the Indian world view, for instance, Brahman, the Ultimate Reality, foundation for all that exists, is both Shiva and Shakti, Cit and Citi, that is, Consciousness and Energy/ Matter, Father and Mother, Heaven and Earth. The integral view of the ancient traditions has been reappraised by the development of new science in our time.

Then, **the deeper Implicate Order of reality –Bohm-, the Unus Mundus –Jung-**, could be seen as a potential world nurturing the empirical and psychic phenomena of the physical/ conscious realm, the “explicate order”.

The Implicate Order or Unus Mundus can be understood as a deeper realm of unified potentiality beyond spatial separation and causal connection in time, a unified ground for mind and matter.

The universe constitutes a gigantic endless flowing from this integral multidimensional whole with various degrees or levels of implication and explication – nothing to do with the flat limited views of modern materialism-.

This deeper level of reality comprises not only potentiality but also orderedness and meaning; there, vibration/ energy and information/ intelligence are inseparable. It is a world of Logos prior to and basis for the physis and psyche of the manifest realm. But this Logos is also a boundless ocean of energy. It is the very source of Life.

Linked to Jung's Collective Unconscious and Bohm's Holomovement or field of energy/ intelligence, the deeper Implicate Order suggests a multidimensional depth of consciousness and reality that goes far beyond the limitations of mechanistic materialism.

The key to understand the new reality is the interdependent unity of energy and matter, of physis and psyche, knowing that this dynamic unity is essentially multidimensional and holographic as the phenomenon of synchronicity manifests.

The interdependent unity of the new holistic paradigm is not only the unity of psyche and physis –mind, energy and matter-, but also the unity of the implicate and the explicate, of the potential and the manifest, the dynamic and the static, the particle and the wave, the conscious and the unconscious.

Furthermore, this holistic living unity cannot be reduced to a polarity between implicate and explicate realms, but rather as a multidimensional holographic continuum with a whole series of strata of consciousness/ reality.

The mystical traditions of mankind had explored and systematized this enthralling spectrum of consciousness/ reality, stressing that every layer of the spectrum is at the same time a level of consciousness and a field of reality, an integral world in a multidimensional multiverse of parallel worlds. Then, the very essence of human realization would be the ascent from the lower to the higher states of consciousness and planes of reality, being aware of the dialectical relation between ourselves and the cosmos.

The development of new science with Jungian/ Transpersonal Psychology and quantum physics has provided a modern scientific understanding of these millenary accounts of reality and humanity.

The Cambridge scholar, P. Russell, stresses that “spiritual teachings and scientific knowledge now share a common ground. (...) With the shift to a consciousness metaparadigm the integration goes much further. (...) This meeting of science and spirit is crucial, not only for a more comprehensive understanding of the cosmos, but also for the future of our species.”²⁰

²⁰ Russell P., 2003, p 117.

Cf also Laszlo E., 2004, p 39-44.

Mystical consciousness.²¹

In the new holistic paradigm, the mystical experience acquires a totally different consistence: from being ridiculed or accused of pathological by the materialistic prejudice to being the key to enter the mystery of consciousness.²²

Just as many animals have the perception of strips of the electromagnetic spectrum that the human senses do not grasp, the mystical experience opens consciousness to dimensions of reality that the ordinary mind does not see. The visualization of the aura, energetic fields or the Light of lights, for instance, implies the existence of realms of reality that exist at the level of the “noumenon” though the ordinary mind does not have a perception of it as a “phenomenon”. But the “phenomenon” exists for the mystical consciousness.

The mystical dimension broadens and deepens human consciousness:

- By opening it to other strata of “**phenomena**” beyond the gross mind or reality;
- By ultimately allowing it to perceive the “**noumenon**” itself through “advaita” – non-duality-, when the Pure Consciousness is One with everything and the source of everything, something that Kant did not experience but mystics do.

Already in 1901 the British doctor, R.M. Bucke, published a classic of mysticism, “Cosmic Consciousness”. Another famous author, W. James, studied it in “Varieties of Religious Experience” and “A Suggestion about Mysticism”. Later on, the renowned writer, C. Wilson, expounded the mystical extension of ordinary consciousness in “Super Consciousness”, and the reputed philosopher, R. Panikkar, presented it in scholarly terms for the modern mind –always in an intercultural perspective East/ West-. C. Wilson writes:

“Bucke concluded that there is another form of consciousness. (...) James suggests that mystical experience is not different in kind from ordinary consciousness, but is merely an extension of ordinary consciousness.”²³

The typically modern prejudice against mysticism cannot be sustained anymore by any scholar or scientist today after the huge amount of research and scholarship already published. However, the materialistic prejudice has changed its strategy; instead of attacking mysticism and considering it as pathological, it ignores it –it is still puzzling and it can only question the materialistic fallacy-. Quantum physics and new science have gone far beyond the accusations or the silence of materialism. Not only they have acknowledged the reality of the mystical experience, but they have even integrated it into

²¹Cf Wilber K., ed., “Quantum Questions. Mystical Writings of the World’s Great Physicists”, 1987

²² Cf Laszlo E., 2006, p 168-175.

²³ Wilson C., 2010, p 44.

the new world view as a higher state of consciousness parallel to deeper levels of reality corroborating and illustrating the new multidimensional world view.

The higher states of consciousness that may be called “mystical” unfold all the depth and purity of human values such as love, compassion, peace, etc. They also manifest a healing capacity that cannot be denied anymore after the clinical study of Reiki or the astonishing results of spiritual neurology. Certainly, they develop other supraempirical powers that should never be searched per se –as wisdom warns-.

In conclusion, the rise of mystical consciousness will disclose all the potential of the human being, while it will nurture ethical persons capable of living in peace on Earth and capable of cooperating and creating -instead of fighting and destroying-.

The Light of Consciousness.

Mystics have often spoken of the experience of the Light. The fact that the same experience is described by spiritual books and traditions from different continents and periods of history gives it an objective consistency that must be seriously considered by scientists and scholars.

From Upanishads, Buddhist Sutras, Plato’s Dialogues or Sufi stories to Sri Aurobindo, J. Krishnamurti, A. Huxley or C.G. Jung, all of them speak of the same Light, unfathomable, more real than anything else, identical to our own self.

That is why spiritual masters from India such as Sathya Sai Baba, following the Vedantic tradition, has proposed the Meditation in the Light for children in an integral spiritually-based education.

Spiritual scientists such as **P. Russell stress the profound parallelism between the inner light of the mystical experience and the light of new physics.**²⁴

The Light of lights appears to be a major recurrent theme in mysticism, while light has been a major topic in XXth century physics –we have expounded above the fascinating research of B. Haisch for instance-.

The light of new physics has no mass and is not part of the material world; similarly, the mystical light is immaterial and reveals deeper realms of reality.

Physical light seems to be fundamental in the cosmos described by new science, just like the inner light is likewise fundamental in higher states of consciousness.

Distance and time ultimately disappear from physical light; in parallel to that, the mystical light is beyond space and time.

Every photon of physical light constitutes an identical quantum of energy, while the Light of consciousness shines in all in the same way.

²⁴ Russell P., 2003, p 57-86.

Hence, renowned figures of new science such as P. Russell wonder whether there is some deeper significance in these similarities, whether there is some profound connection between the light of the physical world and the inner light of higher consciousness.

If there is such common ground between the two lights, something that Russell and Haisch believe, then the common basis for the cosmic unity of psyche and physis would be light, a light inseparable from consciousness, something already discovered and understood by mystical philosophy in all cultures of mankind. Some scientists reach the same conclusion at the end of the XXth century.

That is why the Genesis commands:

-“Let there be Light.”

The confluence of quantum physics/ new science and spiritual philosophy has a direct translation in the field of education: integral education in human values.

Or, to put it in a reverse order: holistic education will find a philosophical and scientific foundation in this convergence of quantum physics/ new science and spiritual philosophy towards the new holistic paradigm.

“Man should recognize the cosmic basis of education.”

Sathya Sai Baba.

However, we must underline a fundamental point: integral education may be seen as the pedagogy of quantum physics not exactly through the experimental part of it as pure physics, but rather through the new world view that it certainly discloses, and also through the dialogue that it opens with spiritual philosophy from this new paradigm. The main figures of quantum physics/ new science have been convinced that their discoveries unveil a new paradigm coherent with mystical philosophy, and this is what becomes crucial for the future of mankind. This is what constitutes the epistemological basis for integral value-based education.

Quantum physics/ new science give a more fluid picture of the universe –like mystical philosophy-, whereas the mechanistic order was founded upon a petrification of reality. Integral education can also open the window to allow the flux and rhythm of Becoming to flow freely –verb, not only noun, hence relation and dialogue-.

Meanwhile, the revolution in the medical sciences towards a more holistic vision of health corroborates the Observer Effect of quantum physics, validating therefore the mystical insights. Integral education can unfold here a tremendous potential towards a positive transformation of the human being: the power of the mind, helping children and youths positively direct their thoughts, and become masters of their own destinies.

Science and spirituality together again, as Swami Vivekananda predicted at the end of the XIXth century together with N. Tesla. Amazingly enough, the unity of science and spirituality was present in the first civilizations of mankind, like Mesopotamia, Egypt or the Indus Valley. Some kind of spiritual approach to science was also elaborated by the Vedas and Upanishads in India, and by Orphism, Pythagoreanism and Platonism in Ancient Greece; it was still present in European Renaissance, especially in the spirit of the Italian genius: Leonardo da Vinci. The last cultural movement to defend it was Romanticism. But the Romantic dream was overthrown by the arrogant triumph of the materialistic paradigm –with mechanism and capitalism- that has finally devastated the planet and humanity; the ecological catastrophe is inseparable from the massive depression and anxiety of people.

Mechanistic physics has been utilized through a process of extrapolation to build up a whole materialistic world view that shaped Industrial Revolution and Capitalistic expansion –and, of course, colonization-. Europe has dominated and exploited other continents, and Man has exploited and dominated Nature –in the name of progress-. This paradigm has brought mankind to the verge of self-destruction. (We refer here to the materialistic paradigm as such, as a world view, not about physics strictu sensu in its pure scientific dimension.)

Integral education in human values, linking academic excellence and self-inquiry, will be the philosophy of education and the pedagogy of the new paradigm –both being equally holistic-.

It is clear that a new model of civilization requires a new pattern of education.

- * The school system that we had until now, and that is presently facing serious problems in Western countries, was the education of mechanism and the Industrial Age.

- * Holistic value education will be the pedagogy of the new paradigm.

Let us put forward **the main points of this historical convergence.**

New science and oriental wisdom have spoken of a multi-dimensional cosmos, in parallel with education in human values that is based upon an integral anthropology depicting a multi-dimensional human being.

The vision of a multi-dimensional reality is truly holistic.

New science and oriental wisdom have overcome the illusion –“maya”- of materialism, showing that there is much more than the macroscopic empirical matter perceived by the senses, exactly like education in human values, which has stressed that there is much more than the body and the mind, and therefore, much more than physical or intellectual training.

The development of quantum physics, in deep coherence with mystical philosophy, has suggested the holographic character of the cosmos: every part contains the whole, and hence, is linked to any other part. This notion of interconnectedness and interdependence is essential to integral education.

New science and oriental wisdom have refused to see Man and the Cosmos as machines, in deep coherence with education in human values, which brings to the pedagogic arena the highest dignity of Man, as expressed by Vedas and Upanishads in India, or by Romanticism in modern Europe.

The new paradigm emerges at the junction of scientific research -like quantum/ new physics and relational theory- and mystical traditions; at the same time, holistic value education is based upon the intimate link between academic excellence and spiritual self-inquiry.

Relational theory brings its name from the decisive role of relation in our living cosmos. Similarly, education in human values integrates the relational and dialectical dimension as an essential part of its pedagogy: not only the relation of man with his fellow beings, the community and the cosmos, not only the dialogue of a discipline or culture with others, but also the inner dialogue within ourselves and the relation between the different domains of our multi-dimensional being.

Quantum physics has acknowledged the open unfinished character of the universe, made of uncertainty and continuously recreating itself. Education in human values is also an open pedagogy, that does not lock the child in a fixed system, but unfolds in front of him or her a path of inquiry that is always evolving like Life itself.

New science has come back to the Romantic vision of a living cosmos that still keeps a sense of the sacred, the mystery and the unfathomable. Education in human values totally shares this Romantic vision, and invites students to wonder, like the true scientist, at the depth, the beauty and the magic of the Cosmos and Life.

Just like new science, education in human values does not pretend to dominate nature anymore, but to live in harmony with others, the environment and the whole universe, participating in the never-ending re-creation of Life.

The coherence between quantum physics/ new science and integral education is particularly striking when we tackle the fundamental binomial consciousness/ energy.

Integral education is essentially an education of consciousness, something that the greatest philosophical tradition of India, Vedanta, beautifully expounded, and recent scientific disciplines like sophrology or epigenetics have further developed. In fact, there is an entire new scientific field which we may call the science of consciousness or the mind's new science. Quantum physics already anticipated this undercurrent of postmodern science. With the famous Observer Effect, the quantum theory could already assert the crucial role of consciousness.

At the same time, quantum physics realized that matter is but a form of energy, and still more important, that consciousness is inseparable from energy within a vision of underlying unity through interrelatedness and interdependence. Together with the work

on consciousness, integral education also acts at the level of energy through a sensible use of meditative paths and techniques of inner work.

The profound introspection which is essential to integral education at both levels –consciousness/ energy- constitutes a pedagogic translation of the quantum world view later refined by different disciplines within the new holistic paradigm.

Therefore, integral education shares the astounding conclusions put forward by the different branches of new science –quantum physics, epigenetics, sophrology, etc-: we can build our own destiny, and become masters of our lives. The innumerable and impressive cases of self-healing by the destitutes of conventional medicine express this capital statement in more appealing terms than any scientific discourse. When a human being is capable of curing himself from the threshold of death, can we deny anymore the crucial role of consciousness and the work on the energetic realm? This dormant potential unfolds the highest dignity of the human being, and also the deepest meaning and purport of education.

Beyond the fallacious determinism and mechanism of modern materialism, quantum physics has given a more fluid and vivid picture of reality: a living cosmos of interrelatedness and interdependence, deeply coherent with integral education and its emphasis on relation and dialogue –at all levels-. In front of the petrified Being of modernity, based on nouns and systems, the new emerging paradigm flows like the very Rhythm of Becoming, stressing verbs and relations, open to the boundless recreation of life.

From the first atomic investigations, quantum/ new physics have enlarged the picture of a vast energetic field made of manifold frequencies/ vibrations even beyond the non-visible colours and the conventional electromagnetic spectrum.

It is especially fascinating to connect this new world view, so different from Newtonian physics, with the scientific experiments on meditation performed in the last decades, for instance in the frame of Maharishi's Transcendental Meditation. It has been empirically proved that in a genuine meditative state the brain shows special waves that will never be found in its normal functioning.

Quantum physics made a true revolution in the scientific arena when it removed the veils of modern materialism: what seems to be solid matter is in fact mostly empty inside, and it is but a form of energy. Another revolutionary statement of quantum physics shattered the dualism of mechanistic science by postulating that the same reality can be seen as particle and wave.

All this scientific revolution becomes even more enthralling when it is related to the functioning of the human brain and the neurological experiments on meditation. The empirical evidence about the new waves present in the meditative brain has tremendous consequences in the educational world.

First of all, it becomes quite obvious on empirical grounds that the energetic dimension of the cosmos and humanity cannot be dissociated; both the universe and the human being can be seen as energetic fields which are always alive in interconnectedness and interdependence and inseparable from consciousness.

Moreover, conceiving integral education as an education of consciousness with an impact at the energetic level becomes too serious a matter when we can empirically prove that the brain presents unknown waves in a meditative state. The fundamental goal of integral education, that is, the transformation of the human being towards higher states of consciousness and vibration, gets empirical evidence through the research on meditation, while it manifests a deep coherence with the world view of quantum physics/ new science.

Conclusion.

This essay has delved into the various disciplines that have been evolving the new emerging paradigm in the last decades. In this paradigm shift, quantum physics has played a major role and will continue to develop in the future. As Einstein said, quantum physics is the beginning of a long path ahead.

In this paradigm shift that is going on everything will change. To start with, what was the very foundation of the modern age: not science but economy. There are already proposals all around the world outlining a new economic system beyond the fallacies and the catastrophe of communism. However, it is clear that the present capitalistic system and the recent neoliberal reign will come to an end and will have to be transformed.

Not only the economy will change; education will also change completely. We said in the introduction that education is a mirror of civilization. If you want to know any society, just observe its educational system; it will tell you in depth what kind of society it is. Renaissance was the transition from the Middle Ages –in fact the ancient world- to modernity, which was radically different from all previous forms of society. This transition constituted a real paradigm shift, and it obviously incorporated an educational shift. If we study the pedagogic developments in Europe through the XVth and XVIth centuries we can realize that the advent of modern education is being prepared, which culminates in the XVIIIth century, the dawn of modernity with Industrial Revolution, the French Revolution and the Kings of Prussia –the first inventors of the modern school-.

The present paradigm shift will again imply an educational shift. The movement has started and already had its forerunners –Steiner and Montessori in Europe, Dewey in North America, Vivekananda, Tagore, Aurobindo, Krishnamurti or Sathya Sai Baba in India-. The mistake that many Waldorf or Montessori Schools have done consists of thinking that the beginning is the end. Steiner and Montessori were geniuses and pioneers –in front of their mediocre followers that have often misunderstood them as usual in the human condition-. They broke with the rigidity of modern mainstream schooling and they opened the door. However, this is only the beginning of the path, not the end. And the worst we can do for the future of integral education is to get dogmatically stuck to the past instead of being open to innovation in the future.

The advocates of integral education should also become aware of the intrinsic link between this new pedagogy –which is in fact as old as mankind- and the new holistic paradigm presented here, with quantum physics in particular.

First of all, integral education needs a theoretical frame, which can be brought by philosophy of education and psychology of education certainly; but it also requires an epistemology, a scientific foundation, and this is the contribution of quantum physics and new science in convergence with spiritual philosophy. As this paper defends, quantum physics and new science constitute the scholarly foundation for integral education; or to put it in reverse terms, integral education is the pedagogy of the new holistic paradigm.

Prof F. Torralba dares to say from the prestigious Jesuit University in Barcelona, Universitat Ramon Llull:

“The transformation of the world and the building of the society start by practising spiritual intelligence. (...) The development of spiritual intelligence is a fundamental part of the educational process of an individual and has direct consequences on other areas of learning.”²⁵

The renowned British scientist, P. Russell, similarly states:

“Today, more than ever, we need a world view that validates spiritual inquiry, for it is the spiritual aridity of our current times that lies behind so many of our crises.”²⁶

One of the major psychiatrists of the XXth century, E. Minkowski, considered that the excess of rationalism of our civilization is pathological; he called it in French “rationalisme et geometrisme morbides”. Minkowski was aware that there is something else that mainstream culture has buried under this pathological scientism and rationalism, which is not irrational but rather trans-rational. As Prof. Raimon Panikkar always stressed, the second eye of knowledge –the intellect- has its own role, but there are three eyes of knowledge, not one, and this pathological civilization has especially discarded the third eye.

Secondly, the new holistic paradigm with the contributions of quantum physics and new science will help educators to understand the depth and the significance of integral education, precisely because it is the pedagogic translation of the new paradigm. Montessori warned the schools bringing her name that the techniques are not essential; the mindset, the intention is of uttermost importance, which means that consciousness is the key –one of the major conclusions of quantum physics-. The philosophical conclusions of quantum physics outlining the new holistic paradigm provide deep insights to understand what integral education is really about; it is about consciousness, it is ultimately an education of consciousness.

As Dr J. Pigem beautifully emphasizes:

“Quantum physics shows that the materialistic and mechanistic vision becomes false when we approach the nucleus of reality.

The social and economic context shows that the search for prosperity through material growth is today unsustainable.

Neuroscience shows that the materialistic vision of the world stems from a kind of thinking, which is logical, linear and literal, that should be at the service of another kind of thinking, broader and more vital: holistic, participatory, contextual and relational.”²⁷

²⁵ Torralba F., 2011, p 299-301.

²⁶ Russell P., 2003, p 117.

²⁷ Pigem J., 2013, p 143.

According to Pigem and others, this is more than enough. Educational authorities will have to understand all the implications of this paradigm shift that is going on and will not stop, and they will have to design new policies in this horizon. This paper is a small contribution in this direction; our expression may be limited, but at least we are sure that this is what the future will unfold.

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Section VI.

As a Philosophical Conclusion.

“Science sans conscience n’est que ruine de l’ame.”

“Science without conscience is but the ruin of the soul.”

Michel de Montaigne -one of the fathers of Renaissance humanism-.

Can the school system ignore the message of wisdom and humanism given by the greatest sages and philosophers?

Hence, can the educational process teach so many secondary details or instrumental tools and ignore the most important –conscience-?

One of the forerunners of modern economics, **Adam Smith**, warned that the famous invisible hand in society can only operate through moral beings, and that economy must be sustained upon a concept of sympathy and regard to our fellow beings.

Can the school ignore this sympathy in the classrooms and teach mere techniques?

Can education refuse to form moral beings and provide information only?

A valueless society may be at the root of the contemporary economic and social crisis.

Science without conscience may be at the root of the most serious problems of mankind.

“Information is not knowledge.

Imagination is more important than knowledge.

It is the supreme art of the teacher to awaken joy in creative expression and knowledge.”

Who expressed this vision of education? An artist? No. A philosopher? No.

Albert Einstein did –one of the physicists who fostered the scientific revolution of the XXth century-.

And what did he say about the present educational system?

“It is a miracle that curiosity survives formal education.”

Any mind shaped by modern materialism, unaware of the scientific revolution produced by quantum physics, epigenetics, sophrology or the mind's new science, could ask:

Why incorporating this integral nature of education into the school system, instead of leaving it to adults on a free basis -for those who wish to try it-?

There are three points to appropriately answer to this question:

- First. Many things taught in school are secondary or instrumental, while the matter of consciousness, the knowledge of oneself, values or ethics, are undoubtedly primary. Hence, is it coherent that the school system gets stuffed with details while it ignores the most fundamental things?
- Second, if the most important things should become optional at the adult stage, why not doing the same with all the secondary details taught in the classroom? Why not leaving for the adult stage on an optional basis the academic subjects too? If academic subjects are compulsory, it is because the idea of education is considered as capital for the sake of the growing human being. But what should be the content of this compulsory educational process? Only purely academic lessons, information and technical tools? What Albert Einstein suggested to be the most crucial dimension in education –imagination, intuition, ethics, conscience- should be out of the school system?
- Third, postponing values, ethics and conscience, and hence, the Socratic knowledge of oneself in relation and dialogue, to the adult stage on a free/ optional basis implies making it more difficult for human beings, and creating more problems to mankind–while it is obvious that a lesser number of people will get to know about it-. If we start in childhood/ adolescence within the school system and for all –in adequate ways to the age-groups-, the personal process of transformation that every human being should undergo will become easier, more guided, and more democratic, since it will be for all. Human society will get the benefit on a larger scale and sooner. Humanity urgently needs a radical paradigm shift inseparable from a shift in consciousness within each and everyone; but this will never happen until it becomes the very foundation of the educational process on Earth. Those who do not want this shift in education do not want the paradigm shift.

The solution of human problems is not technical; it lies at the level of consciousness. To ban the fundamental matter of conscience and the knowledge of oneself from the educational process produces the evils that Albert Einstein clearly identified:

“A perfection of means and confusion of aims seems to be our main problem.”

The metaphor of the body and food.

The need for an education of conscience.

- It is commonly agreed that the health of our body is a direct translation of the kind of food we ingest. If our diet consumes many unhealthy ingredients, our health will certainly deteriorate, while balanced hygienic food will obviously tend to enhance health.
- In the metaphor we propose, the mind is like the body, and cultural inputs like food.
Hence, if the mind consumes low culture full of violence and abject instincts, behaviour will easily tend towards all sorts of alienation and anti-social patterns.

We need not resort to philosophical foundations or scientific evidence; basic common sense should be enough to realize such a fundamental fact of human life – unfortunately, common sense has been lost in the last decades of post-modern evolution-.

Still, we can recall here the astounding conclusions put forward by different branches of new science, such as quantum physics, sophrology, epigenetics or the mind's new science, according to which there is no separation between mind and matter –or energy-, which means that consciousness is the key. Therefore, our patterns of thought certainly determine the course of our lives and the environment around us.

If the predominant mass culture today, filled with violence, vulgarity, low instincts and negative thoughts, is fostering all sorts of alienation and anti-social behaviour that we later deplore;

Is it possible **THROUGH EDUCATION** to promote higher forms of culture and more positive thoughts in order to help the growing human being to transform himself or herself towards a better human being?

Objectivity has been a major fallacy of the age of mechanism. Through the Observer Effect, quantum physics has demonstrated that there is no separation between the subject and the object of observation. Neutrality is another fallacy of the liberal age; nothing is neutral in human life, we must make a conscious decision about the content we morally want or socially need.

Then, educators cannot escape from their moral responsibility and pedagogic function when facing the contents to be provided to children **THROUGH EDUCATION**.

Here lies the Kantian concept of emancipation of the human being and its historical majority. Here lies the Enlightened project of human dignity and the highest ideals of Humanism.

From technocracy to humanism: Human values and self-inquiry.

The present syllabi are still stuffed with an overwhelming excess of information that is not digested by students, only vomited in the exam hall and very easily forgotten when the exams are over, while the capacity of thinking in a free and creative way and expressing oneself is largely underdeveloped.

This general scenario reaches the most dramatic extreme in Asian countries like India, where around 80% of the children are forced to memorize without understanding from dull boring text books full of mistakes in a pedagogic aberration that has been called “the robotic system”.

In the horizon of a paradigm shift, this Project puts forward a holistic and humanistic pedagogy fostering the deepest facets of the human being, largely neglected by modernity, like sensitiveness and tenderness, creativity and imagination, beauty and love.

Education can only be holistic since Man is also holistic like the Cosmos itself –as quantum/ new physics have demonstrated-. Hence, a holistic pedagogy cannot ignore anymore the deepest spiritual dimension of the human being.

However, this is not the realm of religion –as an organized system of beliefs with social hierarchies- but rather the depth of the inner being, a free interior spirituality that has been historically overlooked and even persecuted by orthodox religions. As Jesus Christ said, the Realm of Heaven lies within each one of us.

This new dimension can only evolve through free self-inquiry towards self-knowledge, following the immortal saying engraved on the Temple of Delphos and taken up by Socrates: -Know yourself. This implies the crucial role of Consciousness, as the philosophy of Vedanta in India has always stressed.

On the threshold of the terror of extermination camps, where the wardens were torturing and assassinating with academic degrees and even Ph.D., a group of friends – Jewish and Catholic, three women and one man- would meet to hear the stirring voice of that Mystika/ Mysterion coming from the depth within.

And from that Heaven inside us –as Lord Jesus would say-, from that Brahman at the core of our Atman –as Sri Shankaracharya would say-, the message of Mystika would stay for generations to come to open the doors of a new world that lies inside each one of us:

- “ Be born, my child,
It is already possible.
There is a thread linking
the old existence to the new one.
Cut it, infant, free yourself.
Here, you are One with Him,
Here, you are Yourself.
What is empty, will be filled.
He who he seeks, will find.

The stone has been raised
towards the sky,
And Life has been trodden.
It is not what He has taught.
The stone will be thrown down,
And Life will be raised.
Every Cathedral becomes a grave
If we only announce the Word.
After the message of Joy,
Reality must come.

Rejoice, you are men!
You will become MAN.
Your task is to accomplish
this degree of being.

In the depth of the heart,
The dawn is raising.
Inside, we can already see it.
Outside, you only see the suffering
of the Earth.
There is only one suffering:
To be outside.
There is darkness only outside.
There is death only outside.
It is inside that there is Life.
Our task is the New World.

You must know
what is your destiny.
To recognize your task
Is to see
In its purity your individuality.
You do what you must do:
You transform yourself.
If you transform yourself,
Matter also
Has to transform itself.

Joy is the sign.
Joy is the air of the new world.
What is peace?
It is not the pause
between two wars.
Peace has never existed,
but it will be.
It does not look like anything old.
Peace is the new vibration.
Joy is infinite.

What is Nirvana?
There where two become One.
There where the parallels join.”

Quotations from one of the most beautiful, profound and inspirational books in the history of mankind: **“Die Antwort der Engel”**, in the special German version presented by **Gitta Mallasz** and published by Daimon Verlag in Einsiedeln, Switzerland.

It has been translated into French as “Dialogues avec l’Ange” by Aubier, into Spanish as “La respuesta del Angel” by Sirio, and into English as “Talking with Angels” by Daimon Verlag. The original Hungarian text was also published by Daimon Verlag.

Section VII

Appendix.

The World Crisis of Boys' Education.



Education in human values or integral education will never work within a feminized co-educated school with few male teachers that denies the anthropological drives of boyhood while structurally nurturing a global boy crisis.

The school system must address the deeper drives of boyhood, and only this will solve the global boy crisis; only this will make value/ integral education really work for boys –and also for girls-.

There is today a sharp incoherence between two contradictory phenomena: the pretension to introduce values into the curriculum and the oblivion of boyhood – overlooking the boy crisis and dismissing boys’ anthropology, which implies disdain against boyhood-.

Value/ integral education must start at the structural level: the organization of the educational process and the school. And here, educational authorities and professionals must become aware of all the troubles that this feminized co-educated school has created for boys- while denying the very anthropology of boys’ growing process-.

Value/ integral education must start by treating human beings with humaneness, not alienating them. The deepest philosophy of Europe has analyzed the profound human -and especially male- alienation inherent to modernity. The alienation of boyhood has still worsened in the last decades, producing a global boy crisis never seen before.

The denial of boyhood’s anthropology lies at the core of this alienation. US psychiatrists claim for the return of male mentors for boys. Many experts all around the world warn that boys do not have positive role models of their own gender. All ancient and indigenous cultures knew the crucial role of the initiation for boys. Lord Baden-Powell learnt it in Africa, and from this awareness he created Boy Scouts –which is a modern form of initiation with mentors-.

Education will have to raise the issue of boyhood again.

The U.S. Department of Education released a comprehensive report in July 2000 called "**Trends in Educational Equity of Girls and Women**",

that radically questioned the conventional belief that girls were short-changed in the nation's schools. With all the overemphasis in the previous decades about girls' discrimination, even the statisticians who put the data together were surprised by what they showed.

As the study's director, Thomas Snyder, recognized:

"We did not realize women were doing so well. And boys so badly."

From 2001 on, **Senator Hillary Clinton**, a woman and one of the major figures of the Democrat Party in the U.S.,

Warned about **the crisis of boys' education**

And defended the right for government schools to offer **single-sex classrooms** as private schools can do to offer sound remedies to the boy crisis and an alternative to the problems generated by co-education.

In Australia, documents such as "**Gender Equity: A Framework for Australian Schools**" (1997) still argued in favour of positive discrimination for girls, the assumption being that society was male-dominated and that women were oppressed and disadvantaged.

But from 2000 onwards, what has increasingly manifested in Australia and all around the world with startling data is

a crisis of boys' education;

the figures are striking in all industrialized countries and already start indicating the same boy crisis in developing countries.

When some biased minds were still denying the obvious and worrying reality of the crisis of boys' education, **the official marks in British public exams in 2013/ 2014 were showing a further decrease in boys' performance**, and therefore an aggravation of the already startling gap between boys and girls.

In the United Kingdom, government reports such as “2020 Vision” have warned that **the poor standards achieved by boys** remain extremely persistent and alarming, **for which boys should be taught separately** to stop them falling further behind girls –as part of an overall reappraisal of the educational system-.

British experts have admitted that the present flaws will persist if we continue to do more of the same; a new approach is required –which this educational Project tries to offer-.

In September 2013, the Education Minister of Germany, MS Annette Schavan, again a woman, warned about **the crisis of boys' education** in Germany –as well as around the world-,

And called for **schools to separate boys and girls with new formulae**. Her request was precisely based on the real anthropological differences in growing up that psychology and neuroscience have confirmed in the last years.

On December 9th 2013, **the prestigious newspaper from Barcelona, La Vanguardia**, published an article with a meaningful title: **“Boys: the subject left behind”**, below which this renowned newspaper evidenced the serious crisis of boys' education in Catalonia/ Spain within the global boy crisis all around the world, in all OECD countries first and later in developing countries too. La Vanguardia warned that the boy crisis is not only a pedagogic problem but also a cultural or anthropological issue, since the culture of the last decades is not providing positive models for boys and manifests a deeper crisis of masculinity in anthropological and cultural terms.

“In schools it is girls who are doing better, boys who are in trouble –and special programmes for boys are needed.”

Prof. R.W. Connell, University of Sydney.

The boy crisis in education and society.

A gender gap exists in education all around the world. A higher proportion of girls than boys go on to higher education, girls receive higher grades than boys, amongst whom there is a greater risk of being diagnosed with behavioural problems requiring remedial intervention.

These are some of the findings of various reports such as

**"Boys and School: A Background Paper on the Boy Crisis" (July 2010)
authored by Professor Michael Kimmel**

**for the Government of Sweden/ Ministry of Education and Research/
Delegation for Gender Equality in Schools.**

The New Gender Gap. Exploring the Boy Crisis in Education.

On January 28–29, 2011, a two-day event was held in Berlin, hosted by the Robert Bosch Foundation in partnership with the Canadian Council on Learning (CCL).

The purpose of this event was to bring together a select group of international experts in the field of education and gender.

At this third International Dialogue, CCL presented its new report that was also the focus of this year's discussion: **"The New Gender Gap. Exploring the Boy Crisis in Education"**.

Recently the issue of the boy gap in education or boy crisis in general has been the subject of increasing attention across a number of OECD countries.

The boy gap or crisis starts manifesting in Asian countries like India.

International findings suggest that boys, as a group, are falling behind girls from many academic indicators, and are more likely to have behavioural difficulties or drop out of school completely together with various forms of alienation, hooliganism and violence.

In light of this, during the two-day event, participating researchers, practitioners and policy-makers from Canada, the U.S., the U.K., Germany, Austria, Switzerland and Australia, discussed practical approaches to facilitating improvements in the education and general behaviour of boys.

In February 2012, a 15-year-old boy stabbed his teacher to death in St Mary's Anglo Indian Higher Secondary School in Chennai. What became so common in the USA first, and later developed in Europe, is now coming to India and Asia.

Two years before, in July 2010, a 9th standard boy killed his classmate in Saket, South Delhi.

In February 2012 again, threatened by his economics teacher, a 16-year-old boy committed suicide by hanging himself at his own school campus in Udumalpet, Tirupur District.

We could fill several pages with innumerable cases of all sorts of boys' alienation and violence increasing in the modern world. Everybody knows that, in spite of a certain imitation of male patterns, girls do not show this kind of alienation and violence to such an extent. Some day, mankind will address this crucial issue and ask WHY? In order to implement adequate strategies towards a recovery of boyhood in a vision of human/spiritual values and harmony of the whole while obviously taking care of girls too.

William Pollack, well-known psychologist at Harvard Medical School, in the USA, has summarized this new concern in a few words: Boys are suffering; boys are failing irrespective of ethnic or economic strata because schools are boy-uncentred –they are girl-centred after decades of focusing exclusively on girls and women-.

Crossing the Atlantic, in the United Kingdom, the principal of one of the most prestigious schools in the world, Eton, has similarly warned that: Boys are being failed by the British education system because it has become too focused on girls; we do not support and nurture boys. The UK Government has acknowledged the same.

In Spain also, recent reports –even at the governmental level- are concluding that coeducation has largely favoured girls to the detriment of boys, who are massively performing much lower than girls, to such an extent that nobody can deny it anymore.

In France, sociologists such as J.-L. Auduc, Ch. Baudelot, R. Establet and M. Fize warn the society and the government about the heavy problems concerning boys, who manifest around 75%/ 80% of all pedagogic and social troubles.

At the antipodes of the planet, both the Government and the Parliament of Australia have conducted inquiries, research and programmes to tackle the problems of boys' education. The Australian Government's Parliamentary Inquiry Report has been seen as a first attempt of "recuperative masculinity politics".

In the province of Cordoba, in Argentina, Montserrat Boys' School was considered as one of the top in the country, forming eminent intellectuals and scholars. After introducing coeducation, all the reports demonstrate that the standards of boys have dramatically fallen down. There are thousands of cases like Montserrat Boys' School all around the Western World.

This is only a brief sample of all the materials that could be quoted. After postmodern society has brought the pendulum to the other extreme with visible consequences, awareness is slowly increasing in the whole of the industrialized world. Still, when the figures of boys' trouble were already glaring, government funds were still provided for girls equity, when the only inequity girls experienced was to do better than boys on most indicators of academic excellence. Still, some deeply-rooted bias refused to acknowledge the reality and objective startling figures all around the world, which ultimately expresses despise towards the male gender.

Several initiatives have been started, like the IBSC (International Boys' Schools Coalition), and other settings for boys' schools and boys' education, which furnish all the needed information on the topic. In parallel to that, the world famous Gates Foundation provides the needed attention to the troubles of boyhood that cannot be ignored anymore, and the Gurian Institute in Colorado, U.S., trains professionals and parents about boys' and girls' different needs and learning styles.

Scholarly research has been produced in the whole of the industrialized world amongst OECD countries, Showing common basic tendencies all around the so-called “developed” world:

- Three-quarters of the students who are diagnosed with behavioural problems are boys.
- Three-quarters of the students who create discipline problems are boys.
- Three-quarters of the students who are diagnosed with learning disabilities are boys.
- Boys are twice as likely to have a language/ reading problem as compared to girls.
- Three-quarters of children with hyperactivity disorders are boys.
- In a total of 35 industrialized countries, girls outperformed boys in special tests.
- In the UK girls have outperformed boys at GCSE and A level for 25 years.
- In general, boys score much lower than girls in reading and writing tests.
- Boys earn as much as 80% of Ds and Fs -in the Anglo-Saxon systems-.
- Around three-quarters of drop outs in higher secondary school are boys.
- Boys constitute only around 40% of college students –girls around 60%-.
- In the U.S.A., the percentage of male undergraduate students dropped 14 % from 1970 to 2000 –from 58% to 44%-, and the widening gap continues.

In the last years, India and Asian countries start reproducing the same evils than the Western world.

In general terms: academic failure, learning difficulties, alienation, anti-social behaviour and violence affect boys much more than girls, while girls behave better and get more seats in higher education in comparison with boys and better marks in general terms. WHY?

Boys will deserve attention? –After so many decades focusing exclusively on girls-. Today, boys not girls are being left behind. Today, boys are in trouble. And yet, the social response is insufficient and many refuse to acknowledge it and care about it, which only perpetuates the problem.

The crisis of boyhood is inseparable from general issues concerning masculinity in anthropological terms, and also negative images and patterns concerning the male gender in the culture of the last decades. Boys do not have positive role models of their own gender in mainstream culture.

An objective look at the facts.

The facts about girls:

- Girls surpass boys in reading.
- Girls surpass boys in writing.
- Girls surpass boys in the arts.
- Girls get better grades and more honours than boys.
- Girls are more engaged in school.
- Girls are more engaged in extra-curricular activities outside school.
- Girls have higher aspirations than boys.
- Girls are more likely to graduate from higher secondary school and from college.
- Today there are more girls than boys in college and university.

The facts about boys:

- More boys repeat a grade.
- Boys are more likely to be suspended or expelled from school.
- More boys leave school at an earlier stage or drop out of school.
- More boys need special education.
- More boys smoke, drink and take drugs.
- More boys suffer from low esteem and emotional problems.
- More boys commit suicide and acts of violence or hooliganism.
- More boys perform all sorts of antisocial or violent behaviour.
- More boys become incarcerated.

The marginal advantage of boys in maths and science looks rather pale in front of a general dull scenario for the male gender as compared to girls.

Can anybody deny that there is a real crisis of boyhood today? Those who still deny it are just replicating in a reverse way the same kind of bias and despise they denounce while they perpetuate the same old state of consciousness.

“Girl behaviour becomes the gold standard. Boys are treated like defective girls.”
Dr. Michael Thompson, renowned U.S. psychologist and educational consultant.

What started in Western countries many years back is already happening and increasing in Asian countries like India. Some awareness has been arising in Western countries in the last years, but it is still limited. When the figures were already showing a crisis of boys' education, governments were still funding programmes for girls as they did decades back; but now, it is boys not girls that are left behind. The pendulum has gone from one extreme to the other –as usual in human history-. When will we realize it? When will we do something about it?

The United Nations finds that boys have fallen behind girls in every one of the largest 70 developed nations.

All PISA Reports of the last decades have been dealing with the startling figures of the world boy crisis.

There must be something common to these 70 nations, something global, that explains this international boy crisis:

A feminized co-educated school that never existed before in human history, that has been created in the last decades for the first time, and that obviously does not respond to the anthropology of boyhood. This, the anthropology of boyhood, must have been devastated all around the globe by postmodern civilization; that is why the boy crisis is deep and global.

Moreover, unilateral claims for women have established a structural oblivion and neglect of boys –and males- and even a new anti-male culture never seen before the advent of these unilateral claims with all its bias –the bias of the ego-.

The simple fact that the boy crisis is largely ignored –like men’s troubles- already constitutes a disdain against boyhood and masculinity in ethical terms, and an unconstitutional discrimination in legal terms –by using the language of women’s movements-. To ignore all this has a cost of billions of euros due to boys’ and men’s anti-social and self-destructive behaviour, failure and alienation –and a huge human cost too-.

In the USA: 700% increase in prison population –MALE- in the last 30 years.

One women in jail for 15 men. And the ratio increases.

Still, these 70 most developed nations and the entire human civilization persist to ignore the global boy crisis and the serious male troubles all around the globe. Till when will human civilization be blind?

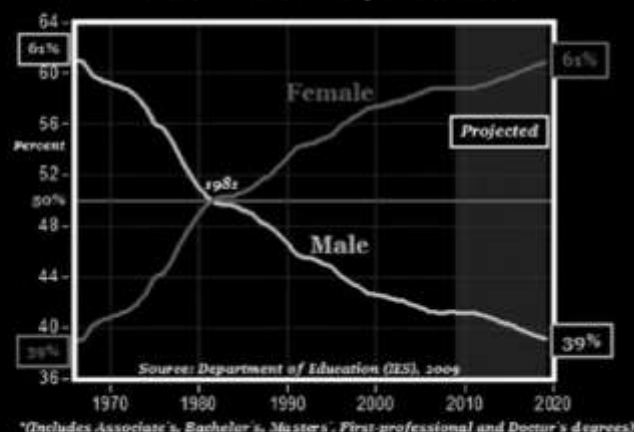
Is there somebody interested in all this alienation and violence?

Down: source: “The importances of having a White House Council on Boys and Men.”

1. EDUCATION

Female college students and female college graduates now far outnumber their male counterparts, a trend that shows no sign of leveling off.

**Percent of All College Degrees*
Female vs. Male, 1966–2019**

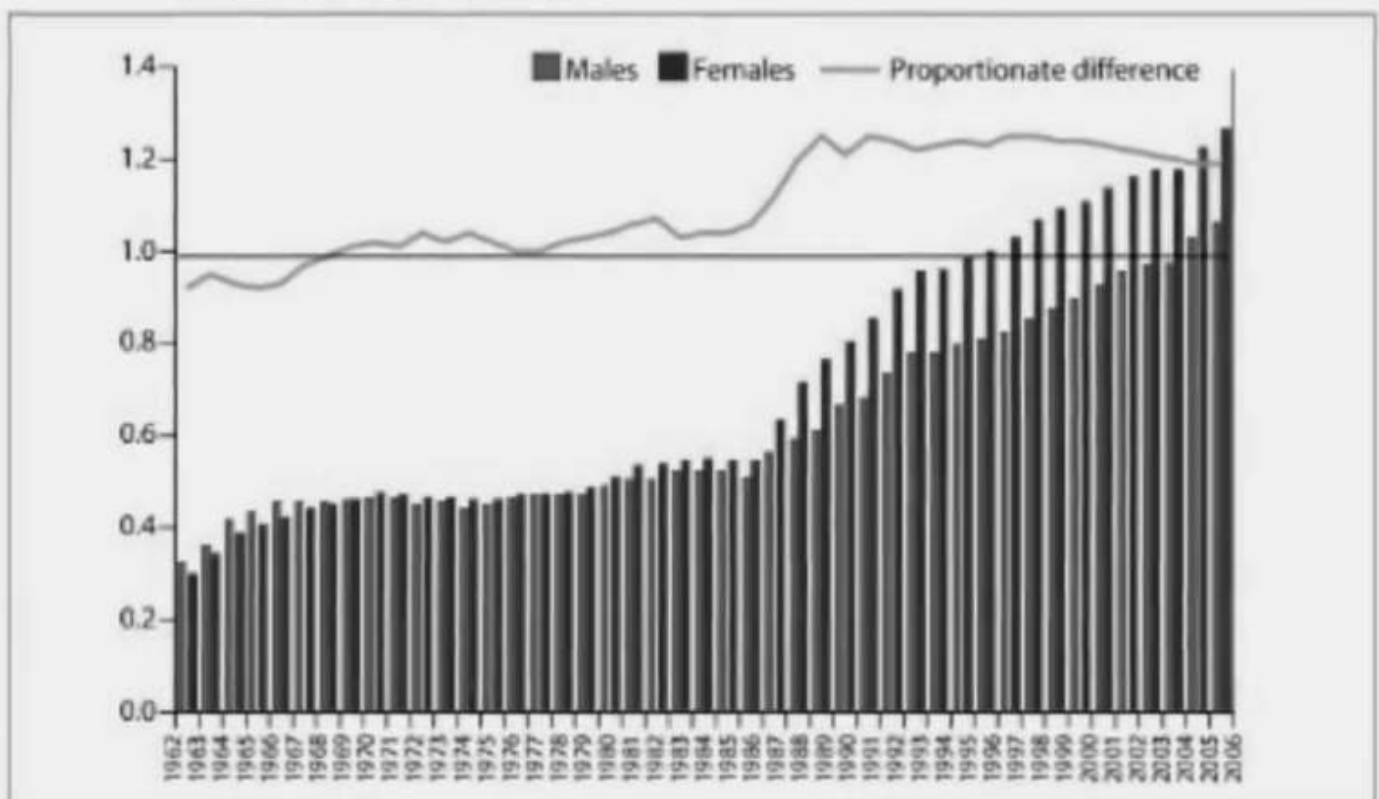


Many experts in the USA and all around the world agree on the main causes for a global boy crisis all around the world as never seen before in human history: (the boys' crisis becoming a men's crisis in one generation)

- 1. Father-deprived boyhood: deprived of father, male mentors, positive male role models, love within their own gender, and the initiatory dimension of boyhood in anthropological terms, ultimately deprived of their own identity, which feeds frustration, Alienation and antisocial/ self-destructive behaviour.**
- 2. The feminized co-educated school with few male teachers that does not acknowledge boys' anthropology and psychology, does not understand them and does not nurture them.**
- 3. The dramatic lack of positive patterns of masculinity in the society and mainstream culture, with new trends establishing an openly and astounding anti-male culture within a society unilaterally and vehemently centred on women and girls only.**

Down: source: "Examining Male Underachievement in Education."

Figure 7-1 Gender Difference at O-level/GCSE and Proportionate Differences in Female/Male Achievement



➤ **Why has there been a request for the President of the USA to create a White House Council on Boys and Men?**

“By almost every benchmark, boys across the nation and in every demographic group are falling behind.” (Newsweek, “The Trouble with Boys”.)

After several decades of gender discourses and policies completely unilateral, exclusively centred on girls and women while completely neglecting boys and males –the forgotten gender-, a new reality has been created that never existed before in human history:

A world crisis of boyhood –educational and general- amidst profound troubles of masculinity.

- For the first time in the history of the USA, we have now the first generation of boys who will have less education than their fathers. The same phenomenon is manifesting in all industrialized countries, and it even starts to manifest in developing countries such as India, China, etc.
- Female college students and graduates now far outnumber boys in the whole world; we are reaching 40% of men in university versus 60% of women.
- In the school system, boys lag behind girls on all academic measures. **Though the figures slightly vary according to nations, the USA becomes paradigmatic.**
- Boys massively receive lower grades than girls.
- Boys receive 70% of Ds and Fs on report cards.
- Boys massively score lower than girls on all measures of writing skills.
- Boys massively outnumber girls in all remedial classes.
- Boys are 2 to 3 times more likely to be placed in special education classes.
- 75% of children diagnosed with learning disabilities are boys.
- Two boys are held back in grade for each girl held back.
- Boys make up 80% of behavioural disorders diagnoses.
- 80% of children diagnosed with emotional disturbance are boys.
- 80% of school children on Ritalin are boys.
- Boys make up 80% of school disciplinary referrals.
- 80% of students expelled from school are boys.

In front of this dismal scenario, women demonstrate for their rights on the international day for women, and schools close down to celebrate women's day:

whereas it is boys who are massively underachieving and manifesting all problems. **For how long will civilization be blind to this dramatic reality?**

Sociologically, a world ignoring this boyhood-and male- catastrophe will be a hell –see already the state of the world around-.

Ethically, it is enough to recall the great philosopher, Kant: ethics is universal –not unilateral, not only for women, but for males too-. Boys –and men- also deserve attention some day. Egoism is not emancipation –which is universal, not unilateral-.

As Dr N. Johnson has underlined (“Literacy and the Male Brain”), the school system is obviously favouring girls to the detriment of boys, who massively underachieve across all social sectors in all industrialized and also developing nations all around the globe.

The boy crisis is deep and global; it strikingly manifests that something has gone wrong in relation to the male gender in the last decades all around the world.

- Many boys spend their boyhood in female-run homes and feminized schools with few male teachers: without fathers, without male mentors, without male role models, which is tantamount to **denying their male identity**, which in its turn can only feed frustration, alienation and all the rampant evils of the male gender in this world in terms of anti-social and self-destructive behaviour.
- In many industrialized countries, a third of boys are raised in father-absent homes –whereas boys crucially need the father and male mentors for basic anthropological reasons of gender identity.
- As anthropologists recall: unlike girls, **boys are males that come from a women –mother- which makes the building of boys' own identity more difficult and hazardous –it is enough to observe all the troubles of boyhood and manhood-.**

- Many experts have been repeating in the last decades that **jails are places for father-deprived boys**: deprived from fathers, mentors, male role models and ultimately their own identity, deprived from positive patterns and love within their own gender, which can only engender alienation and all the evils we face and deplore.
- On the other hand, anthropologists warn that **boyhood is essentially initiatory**, the history of humanity makes it crystal clear, which means that boys crucially need from 8 and even more from 10 onwards the role model – positive and loving- of the father and mentors.
Can we ban the most fundamental human value, love, from the growing process of boys within their own gender and identity?

To deny the fundamental anthropological drives of boyhood is equal to devastate boyhood, which then manifests through all the dramatic troubles and evils of boyhood and manhood in this world. Anthropologists and historians have realized that all this anti-social and self-destructive behaviour does not exist or is marginal in ancient and indigenous societies that recognized these deeper drives of boyhood.

- In parallel to that, USA psychiatrists claim for the return of mentors for boys.
- In New York City, the Eagle Academy for Young Men has implemented a mentoring programme through which every boy takes a male mentor in the area. The impact of the mentoring programme has been “beyond profound” in the words of David C. Banks, Principal. All the African American boys of this area have improved academically and in general terms when accompanied by an elder male mentor.
- In general terms, boys with father involvement do better in all areas, and boys with good mentors –apart from the father- also show positive changes for better, more self-confidence and self-esteem. **Human societies knew this for thousands of years, only our postmodern societies are dramatically overlooking basic anthropology.**

“Boys get unfairly labelled as morally defective, hyperactive, undisciplined, or “problem children”, when quite often the problem is not with the boys, but with the families, extended families, or social environments, which do not understand their specific needs as human beings and as boys.” Dr M. Gurian (“The Good Son”.)

- In the USA and other industrialized countries **the boy crisis is already manifesting as a male crisis at the adult stage** -in terms of unemployment for instance-.
- In parallel to that, in many industrialized countries two thirds in the new generations of academic professions such as magistrates or physicians are women, men only one third.
- This is obviously a direct translation of women visibly outnumbering men in college/ university for the last 40 years; **inevitably, some day this outnumbering at the educational level should be translated into an outnumbering at the professional level.**
- 92% of workplace deaths are men. But there are no special policies for this.
- In the 1920s US males lived 1 year less than women; now they live 5 years less. And still governmental offices for boys' and men's health are non-existent.
- Furthermore, we should not forget **all the social evils manifested by men much more than women such as:** hooliganism, violence, rape, delinquency and crime, alcoholism, drug-addiction, suicide, etc-.
- There is one woman in jail for 12 to 15 men! But governments, societies and the whole postmodern civilization are still incapable of realizing that there is a world boy crisis and profound troubles of the male gender.
- 90% of adolescents in correctional facilities are boys.
- 80% of children and adolescents who commit suicide are boys.
- Postmodern societies integrated women into the workplace but totally forgot to integrate men into the family, the school and even all sectors dealing with human care.
- A society so concerned to have police-women –even as military personnel- that does not care at all to have only 25% of males in the schools system can only be regarded as a deeply sick society. We are paying a high price for it with all the troubles of boyhood and manhood that are still not addressed.

- **Postmodern societies are paying a huge bill for completely forgetting boyhood and the male gender.** The antisocial and self-destructive behaviour rampant in our societies due to this oblivion of boyhood and masculinity costs billions of euros to all developed nations –and also to developing countries now-, apart from the human cost that cannot be calculated in monetary terms.
- **Before women’s demonstrations for the international day of women, the postmodern world must ask itself if it can carry on with this dramatic oblivion of boyhood and masculinity.**
- **Reality is interdependent**, and women will have to learn through suffering the lesson of interdependence and the harmony of the whole: “emancipated” women shouting at their rights amidst a mass of troubled boys left behind and a catastrophic masculinity will never have peace on Earth. Meanwhile, all evils are rampant.
- **Moreover, ethical arguments** will remind us that ethical principles are universal, not unilateral; if they apply to women they must also apply to men and boys.
- **In postmodern societies**, the streets and malls massively show images of women only, voices on the phone or apps are female voices only, all books have special chapters on women only, cultural life thrives with lectures on women only, advertisements and programmes enhance the value of women only.
- Meanwhile, **mainstream newspapers** write that the future is in the hands of women, which is telling boys that their gender has nothing to contribute to humanity. Meanwhile, **official textbooks in India** write that women are better than men.
- In which world are boys growing up today? Where is the value of the male gender in the postmodern world for the new generations of boys?
- Again, let us remember:
 - 80% of children and adolescents who commit suicide are boys.
 - Boys make up 80% of behavioural disorders diagnoses.
 - 80% of children diagnosed with emotional disturbance are boys.
 - 80% of school children on Ritalin are boys.
 - Boys make up 80% of school disciplinary referrals.
 - 80% of students expelled from school are boys.

- Meanwhile, these are the trends in countries like India: -Educate the girl. (Boys are even not mentioned); or they still say: -Girl = to boy. (But not: Boy = to girl).
- Whereas the global boy crisis already manifests in India and all developing countries amidst profound and dramatic troubles of manhood in general terms.
- **But India, the developing world and the developed nations, the whole human civilization, is still ignoring the global boy crisis amidst all the rampant evils of the male gender in terms of alienation, antisocial and self-destructive behaviour.**
- Meanwhile, the world boy crisis persists and worsens amidst all the dramatic troubles of manhood; **which shows how deep is the male alienation inherent to modernity** –as European philosophy has studied in depth-. Why males cannot react in relation to the boy crisis and their own gender troubles? Who is interested in all this alienation?
- As the British Government acknowledged in the “2020 Vision” Report, there is something that societies do not see yet, and hence do not address. **For how long will human civilization continue to be blind?**



Apart from anthropological issues such as the fundamental role of the Gurukula and its underlying initiation for boys, there has been increasing research and publication about the differences between boys and girls in the educational process (divulged by organizations such as IBSC, authors such as M. Gurian, and a number of academic papers and governmental reports such as the Australian report “Boys. Getting it Right”).

In this horizon, it has been proved that **there are noticeable differences between boys and girls even at the biological/ neurological levels, which obviously has a direct translation in the field of education.**

- It is not possible to deny anymore that there are important brain and physiological differences between the two genders that affect the pedagogic practice.
- For instance, in relation to what is known as navigational tasks: in the female brain, these tasks are assigned to the cerebral cortex (the section of the brain that also processes language); while in men, the hippocampus handles this kind of tasks (the hippocampus is one of the oldest parts of the brain, responsible for long-term memories, but with few connections with the cortex).
- This basic brain difference has important consequences in the teaching of maths – especially, geometry, algebra and number theory-. Boys can easily focus on the properties of numbers, while girls require a real-world application.
- Emotional activity is processed differently in boys’ and girls’ brains. In the female gender, through adolescence, the brain activity related to emotion shifts to be processed in the same area of the brain involved with reasoning (the cerebral cortex); while in the male gender, brain emotional activity has no connection with the area of the brain dealing with reasoning, since elder boys continue to process emotional activity in the amygdala –like young boys-. (The amygdala is one of the oldest parts of the brain, with no direct connection to the cerebral cortex). That is why girls will be more easily interested by the characters’ feelings in literature, while boys will be more attracted by action, real-life events and adventures.
- Boys develop gross motor skills faster than girls do –like running or jumping-.
- However, boys develop fine motor skills later than girls do –like gripping a pencil, hence writing, or cutting with scissors-; this constitutes a basic biological factor that must be considered by the educational system in kindergarten and primary school.
- Boys also develop language skills later than girls do, which means that reading and writing may be more delicate in the early stages of schooling for boys.
- Boys develop spatial skills earlier than girls do, which means that boys can more easily record information about the environment and the position of things, for which boys may be encouraged to build, explore and manipulate things.

- According to these brain differences, books with stories involving emotions and psychological insights will not be so suitable for boys, who will prefer to read about real events, how things work, or, in fiction, enthralling figures and wondrous adventures.
- Neuroscience has observed that the pleasure centre of the brain lights up more for boys when they take risks as compared to girls.
- Boys are kinaesthetic learners, which means that they learn very well by manipulating, building and making things move; for this, all the educational toys involving construction and movement are specially appropriate for boys.
- A more energetic and mobile teaching style is more suitable for boys, keeping them focused; unlike girls, boys respond better when they are kept on their toes.
- Boys tend to overestimate their abilities and performances—unlike girls—, for which boys need to be challenged externally in order to improve.
- Boys do not hear as well as girls do, which means that the pedagogic space must take into account this biological difference -instead of piling up so many boys at the back of the class-room with a female teacher speaking softly-.
- Since the advent of quantum physics and the development of new physics and other disciplines like sophrology, it is scientifically acknowledged that matter is but a form of energy –inseparable of consciousness-. In parallel with that, medical colleges and hospitals have officially recognized the validity of energetic therapies, like acupuncture, reiki, etc. On the other hand, when collective meditation is performed seriously, men must sit on one side and women on the other. The reason is that we are not only matter and mind, but also this energetic structure and dynamism that is now scientifically apprehended. From the energetic point of view, just as the male and the female brain work in different ways, the female and the male energies are also different enough, which suggests separate spaces of meditation for both genders.
- The wisdom of the East and the millenary traditions of energetic work in countries like India or China, today officially approved in the West, manifest even deeper dimensions when facing the anthropological differences between the two genders. How could education ignore these real differences, until the deepest levels, and force an artificial coeducation that only responds to ideological principles? (While it becomes empirically evident that this artificial coeducation, politically imposed, has not worked, especially for boys.)

Researchers have long agreed that girls show better performance than boys in terms of language abilities whereas boys have better spatial skills.

Now, scientific research from different institutions such as North Western University, the University of Haifa, Virginia Tech., the National Institute of Health in Bethesda, Maryland, US, etc, provides a biological/ neurological basis that accounts for these differences, and that has been summarized by scholars such as Dr L. Sax.

However, everything cannot be reduced to neuroscience; its last findings are consistent with much older evidence produced by cultural anthropology through human history – without forgetting a deeper philosophical perspective-.

The most significant difference between boys and girls at the neurological level is not in brain structure, which is the same, but rather in the sequence of development and in the functioning of the various brain regions. As Dr. Natalya Kuindzhi from the Russian Academy of Medicine has concluded, the need for segregate education stems from real different rates of mental and emotional development between girls and boys.

These findings do have major implications for teaching children, and hence provide scientific support for single sex classrooms or schools.

- Average intelligence is the same for both sexes.
- However, there are more boys or men at the highest and lowest extremes (which counterbalance each other giving the same average than for girls or women).
- There are no basic differences in what boys and girls can learn;
- But there are big differences in how they can learn and how they can be taught.

Since boys' and girls' brains develop and function differently, it is empirically observable that boys mature faster in some areas while girls mature faster in other areas.

A sensible pedagogic system cannot just mix boys and girls without taking into account these real and significant differences. If we teach the same subjects and contents in the same chronological sequence and in the same pedagogic way, it is inevitable to create unnecessary problems to both girls and boys, though the historical experience of coeducation has affected boys much more than girls: the crisis of boys' education that cannot be denied anymore and that must be faced with a reorientation of the educational process.

- Neuroscience or physiology do not explain the present disparity between girls and boys in academic achievement. The biological differences observed by the last scientific findings confirm the existence of anthropological idiosyncrasies that were well known before this recent scientific observation.
- What causes the dramatic present disparity is obviously the educational system itself –with its massive unquestioned coeducation that has not worked for boys-.
- The new experiments segregating the two genders again in a new spirit show positive results everywhere, and suggest for the future of humanity a new separation that does not want the past girls' inequity but wants to redress the present boys' inequity.

Regarding language, the neurological differences between boys and girls cannot be overlooked and do have pedagogic implications.

- Boys and girls rely on different parts of the brain when performing language tasks.
- Areas of the brain associated with language work harder in girls than in boys during language tasks; girls show greater activation in these areas than boys.
- Language processing is more sensory in boys and more abstract in girls –implying brain areas associated with abstract thinking-.
- For boys, accurate performance depends when reading words on how hard visual areas of the brain work. In hearing words boys' performance depends on how hard auditory areas of the brain work.

These biological differences should inform teaching methods, which means that boys and girls cannot be mixed since they must be taught differently.

- Given boys' sensory approach, boys should be evaluated on knowledge gained from lectures via oral tests;
- And on knowledge gained by reading via written tests.
- For girls, whose language processing appears to be more abstract, these different testing methods could be less necessary.

In terms of left and right hemispheres development, noticeable differences have also been observed between the two genders.

Right-hemisphere brain development dominates in pre-schoolers. By the time children first go to school, first-graders manifest differences according to gender:

- While girls display significant left-brain development –logical thinking-,
- Boys continue to be dominated by right-brain activity –creativity and imagination-.
- In general, the patterns of brain activity mature faster in girls than in boys.

How can coeducation still ignore it? To do so will only reinforce boys' trouble and failure in language skills as it has been massively happening in the last decades, since boys have been expected to behave as girls in the co-educated context.

Young boys see information holistically rather than in detail –as girls do-. Boys can more easily do creative work, while girls can do better in detailed work. For boys, the idea is more important than petty norms, freedom more important than established rules. Boys' brains are more suited to pictures, symbols, abstractions and spatial-mechanical thought. So, boys perform better in maths, physics or philosophy. Instead, girls work better within a system and follow guidelines more easily; they can also work with detailed issues more happily. For this, girls have better met the expectations of traditional schooling in the coeducational world, while boys more strongly require a more holistic pedagogy –adapted to their anthropology-.

Let us see in more detail **the major neurological differences between the boys and the girls' brain** that will help us understand the differences in growing up between both genders and the deepest drives of boyhood ignored in the culture of the last decades.

(This constitutes a sample among the hundred neurological differences tracked over by neuroscience between the male and the female brains).

- Boys' brains have more grey matter while girls' brains have more white matter. Grey matter is a kind of neurotransmitter that localizes and compartmentalizes, keeping brain activity in a single place rather than spreading activity to other parts of the brain. White matter, on the contrary, networks brain activity to different parts of the brain.
- Therefore, the boy's and man's brain tends to compartmentalize its brain activity into fewer brain centres than the female brain does.
- In opposition, different parts of the female brain may easily work simultaneously in ways that the male brain does not.
- There is 15/ 20 % more neural activity in a girl's brain than a boy's at a given time.
- Girls and women have a higher number of nerve fibres in their skin as boys and men. This means that pressure receptors on the skin and pain receptors in the brain are less sensitive in the male brain than in the female.
- The boy's brain shuts off, that is, enters a rest state, more times per day than a girl's brain does. This has clear implications in terms of paying attention in the classroom, completing tasks, becoming bored, and even having a conversation.
- In the male brain, especially in the right hemisphere, there are more neural centres than in the female studying the movement of objects and the physical space.
- Hence, boys' education must allow them to use cubes, balls, stones and all sorts of objects, and also to manipulate and build things, something that appears to be less crucial for girls.
- For thousands or maybe millions of years humanity knew that the boy's and the girl's energies are different. Only the last decades of coeducation have dogmatically denied it on pure ideological grounds. Today neuroscience has proved that there is a deep neurological reason for it.
- As we have seen above, emotional activity is processed differently in boys' and girls' brains. Through adolescence, the girl's brain activity related to emotion shifts to be processed in the same area dealing with reasoning (the cerebral cortex); while boys' emotional activity has no connection with the area of the brain involving reasoning, since elder boys continue to process emotional activity in the amygdala.
- As we said above, this explains why girls will be interested by the characters' feelings in literature, while boys will be more attracted by action and adventures – the deep drives underlined by M. Gurian-.

- This neurological basis also explains why boys need hitting of each other as a bonding mechanism to express affection and nurture affectionate relationships, either with friends or adults –father, uncle, teacher, scout leader or other men-. That is why jabbing at one another, bantering, etc, are typical male ways of creating bonds and expressing love, ways that are so different from girl's patterns and the female world.
- It is obvious enough that co-educated spaces –especially in areas such as scouting- tend to repress these male ways of bonding, which can only nurture alienation on the long-term as it has already happened, which in turn fosters all the forms of boys' violence and anti-social behaviour that we must face in all industrialized societies. The post-modern age has gone too far in eliminating all intra-generic spaces and bonds, dramatically replaced by an overwhelming abuse of mix everywhere, never allowing the growing human being to interact in depth within the same gender –something crucially needed in the growing process-.
- Another neurological difference accounts for something fundamental in the pedagogic treatment of boys. The boy's hippocampus (a major memory centre in the brain) is less active than that of the girl, especially during emotional and relational experiences. This implies that boys may not recall parts of their developmental journey that girls will more easily bring back. This means that boys can feel insecure and lost more easily than girls, which may nurture alienated behaviour more easily too –as we can see in our world today-.
- For this fundamental reason, boys need much more than girls the guidance of the adult –especially in the same gender-. That is why all the educational traditions of mankind emphasized the importance of the Gurukula and the role of the Guru or mentor for boys –as stressed in this Project-. The denial of this basic fact, today better apprehended through neuroscience, has only promoted all sorts of alienated and antisocial behaviour in boys through a crisis of boys' upbringing that is unique in human history.

It is obvious that there are biological factors that may encourage within certain socio-cultural contexts aggressiveness and violence –this is what has been too often done till now-. Millions of years of hunting and thousands of years of wars have created some undeniable inertia. But as mystical philosophy would remind, the Light of lights shines in all, girls and boys, men and women, and there are biological factors that incline the male gender towards positive tendencies such as creativity and freedom. The bias of XXth century coeducation and its inherent neglect of boys and men's troubles have only nurtured the lowest tendencies of the male gender. A new holistic pedagogy in a new holistic paradigm must encourage the highest nature of boys and men –and obviously girls and women too-. The XXth century bias forgot boys, whereas a new world will not be made by girls or women only, but by all, with the male gender too in its highest and purest potential –not the lowest as it has been too often till now-.

Furthermore, the last scientific findings have evidenced biochemical differences between the two genders, that enhance the already visible neurological differences accounting for anthropological idiosyncrasies.

- Boys have between ten and twenty times more testosterone than girls. Being testosterone a risk-taking chemical, we find here further scientific confirmation of the deep drives outlined by specialists such as M. Gurian.
- This explains why boys have massively practised much more than girls activities such as scouting, mountaineering, and all sorts of outdoor activities that imply risk-taking and the sense of adventure.
- The educational world must understand these biological differences hardwired into boys for millions rather than thousands of years, and allow them to be expressed in controlled or pedagogic ways instead of denying or suppressing, as it has been too often done in the last decades, nurturing as a reaction all the alienation and antisocial behaviour that we know well enough.
- Another biochemical factor accounts for further differences between boys and girls' energies, while enhancing the neurological disparities that already explain the anthropological idiosyncrasies. Oxytocin is known as the bonding chemical. Not surprisingly, boys have less of this bonding chemical than girls do.
- This means that girls can bond easily with many people, while boys find it more difficult to create bonds, especially of a stable or deep sort. Hence, boys need more help and guidance in bonding, and they also need more opportunities such as team games or mentoring systems. That is why scouting or similar movements like the Boys' Brigade or the German Wandervogel have been so successful and so well appreciated at a pedagogic level.
- Boys have less serotonin than girls do, a chemical that calms us down.
- This explains why boys are more impulsive than girls, and have more trouble to control themselves, something that a sensible pedagogic process must take into account.

The differences between the male and the female brains in terms of neurological connections.

Repercussions in the educational field: the need for separate educational spaces and special attention to be given to boys.

We have quoted above in the section devoted to Psychology and Neuroscience the neurological research recently directed by **R. Verma** within the frame of the **University of Pennsylvania in the USA**. According to empirical results:

- The male brain shows more connections within each brain hemisphere; only in the cerebellum, responsible for psychomotor tasks, men manifest more connections between the two hemispheres.
- In general terms, the female brain shows more connections between the two brain hemispheres.

The differences are still not visible in early childhood, but they gradually manifest from puberty on –in spite of the still predominating school system based on coeducation–.

The ideology prevailing in the last decades has tended to overlook any anthropological difference between the two genders, and has therefore imposed a standardized pedagogy for both irrespective of any real differences, while it has overstressed the fate of girls and openly neglected that of boys for many years. This new unbalance that has brought the pendulum from one extreme to another one has produced a profound crisis of boys' education never seen before.

A more humanistic kind of education will not deny the real anthropological differences anymore, and will not continue to neglect boys either.

In the horizon of a needed Hemisphere Synchronization, boys and girls will require separate complementary spaces of education that can take into account and adequately work out the real anthropological differences till now so openly overlooked.

Regarding the male gender, the educational process will have to be especially vigilant and offer boys the needed tools so that they can build more neurological connections between the two hemispheres, which does not happen so easily in the male brain according to empirical research.

Facing the crisis of boys' education in Australia.

- **The House of Representatives/ Standing Committee on Education and Training (Parliament of Australia)** conducted an inquiry in 2002 into the education of boys in Australian schools.

The Inquiry resulted in **several initiatives**:

- As a response to the Inquiry's findings, the Boys' Education Lighthouse Schools (BELS) Programme was implemented in two stages over 2003-2005. The programme provided funding to over 550 schools to help improve boys' educational outcomes.
- The Final Report of Boys' Education Lighthouse Schools (BELS)/ Stage Two provided a detailed analysis and discussion of the key findings and experiences of the 550 schools.
- Success for boys based upon BELS was continued throughout successive years.

- **The Australian Government has sponsored various research projects concerning boys' education.**

- To start with, the Australian Government/ Department of Education, Employment and Workplace Relations requested the research report quoted above addressing the educational crisis and needs of boys.
- The Australian Government was also the major sponsor of the 5th Biennial "Working with Boys. Building Fine Men", held on July, 4-6th 2007 at the University of Newcastle.

Educational Consultants Bret Burkholder and Ed Leitner, founders of Boys' Hearts and Boys' Minds (U.S.A./ California)

Conclude that we must make schools more boy-friendly instead of giving boys more and more Ritalin to make them behave in a system that is not suited to them.

(While Ritalin has serious long-term side-effects stunting physical and mental growth).

Till now teachers and administrators did not pay enough attention to the boys' educational crisis and needs. It is time to face the challenge.

More and more voices request a new separation of girls and boys, not in the state of mind of the past but in a new awareness and with a new pedagogic spirit, which means acknowledging the anthropological differences in learning and caring about all –boys too, not only girls, within the harmony of the whole-.

Denying the anthropological differences in learning through universally imposed an unquestioned coeducation can be seen as another example of the artificial character of modernity, inseparable from denying the holistic multidimensional nature of the Cosmos through the reductionistic materialism of the Newtonian world view. In all the cases, modernity has operated a tabula rasa in relation to reality.

In this Project, not only we put forward a general theory and practice of integral education in coherence with the new holistic paradigm, but we also propose a new pedagogic formula beyond the crisis of boys' education, that instead of yearning for the past aspires to a better future and harmony in the frame of the new paradigm.

- From 2001 on, Senator Hillary Clinton, a woman and one of the major figures of the Democrat Party in the U.S., defended the right for government schools to offer single-sex classrooms as private schools can do.
- From then, the number of government schools in the U.S. offering single-sex education has rapidly increased under the auspices of the National Association for Single-Sex Public Education chaired by Dr. L. Sax.
- In the United Kingdom, government reports such as “2020 Vision” have warned that the poor standards achieved by boys remain extremely persistent and alarming, for which boys should be taught separately to stop them falling further behind girls –as part of an overall reappraisal of the educational system-.
- British experts have admitted that the present flaws will persist if we continue to do more of the same; a new approach is required –which this educational Project tries to offer-.
- In September 2013, the Education Minister of Germany, MS Annette Schavan, again a woman, called for schools to separate boys and girls with new formulae. Her request was precisely based on the real anthropological differences in growing up that science and neuroscience have confirmed in the last years.
- In Russia, several experts such as Prof. Vladimir Bazarny or Dr Natalya Kuindzhi have highly recommended that girls and boys should be taught and study separately since they perceive the same information and learn in different ways.
- In some pioneering schools such as the Harmonia Lyceum in Zheleznogorsk, Siberia, and in 2000 schools following Prof. Bazarny, the segregation of boys and girls has proved to be one of the keys for a new pedagogic success.

In virtually all the cases where new segregated class-rooms have been implemented, either in the U.S., the U.K., Germany, Russia or anywhere in the world, the academic and general performance of boys has clearly improved, the crisis and alienation of boyhood hence showing a tendency towards a net recovery.

Successful single-sex classrooms or schools have **a positive effect on student achievement for both boys and girls.**

- Girls classrooms or schools can overcome old stereotypes and help them attain higher achievement in maths and science.
- Boys' classrooms or schools can overcome the present crisis of boyhood, enhance their self-esteem, and help them attain higher achievement in language (reading and writing) and also in arts or civics.

For a clear and impressive review of the research on single-sex classrooms or schools, we can see: **Peterek Emily**, "Sex in the Middle School.", "Florida League of Middle Schools Journal", vol. 9. For instance:

- In a three-year study in the mid-2000s, researchers at **Florida's Stetson University** compared the performance of single-sex and co-educated classes at an elementary school. When the children took the Florida Comprehensive Assessment Test, the results were striking: only 59% of girls in co-educated classes were scored as proficient, while 75% of girls in single-sex ones achieved proficiency. Even more striking results for boys: 37% of boys in coeducational classes scored proficient, compared with 86% of boys in the all-boys classes.
- In 2000, Mr. Benjamin Wright, the Principal of **The Thurgood Marshall Elementary School in Seattle, U.S.**, separated the school into all-boy and all-girl classes. Before these changes, only 10% of boys met the minimum standards in reading. After the new separation, 66% achieved the standards, while girls also improved. The new separation also ameliorated discipline and enhanced a more positive relationship between boys in terms of camaraderie.
- **The Brighter Choice Charter School in Albany, New York**, was the first charter school in the U.S. to adopt single-sex classrooms under the same roof. With the new separation, all standards have improved, especially for boys –who were doing very badly- but also for girls –who were already doing better-. Only after the separation the school has achieved Adequate Yearly Progress and has been considered in good standing according to the New York Department of Education.

There are hundreds and even thousands of similar examples all around the world. For how much time do we want to deny the facts and stick to the inertia and bias from the past?

How much more evidence at all levels do we need to acknowledge the facts and redress the present scenario towards a recovery of boyhood in harmony with girls' achievement?

It has been recently acknowledged by educational research that boys –especially after 8/ 10- learn best with other boys and a male teacher in a master/ pupil relationship (the Gurukula), rather than with mixed groups in one big class-room.

Although we can provide scientific/ neurobiological evidence about the differences between boys' and girls' learning styles, we should not forget the inputs of anthropology through human history, and we should not dismiss the philosophical perspective; neuroscience or the brain cannot tell the whole story.

A survey commissioned by the Training and Development Agency for Schools in the United Kingdom concluded that:

- male teachers are crucial role models for boys;
- boys find male school teachers more approachable and an inspiration to work harder;
- boys are also more likely to approach male teachers for personal problems, issues concerning puberty, or problems about bullying.

But according to the Higher Education Statistics Agency, only 23% of those qualifying to become teachers in 2006/ 2007 were men, manifesting, therefore, a widening gulf between the numbers of men and women gaining teaching qualifications and being ready to teach in schools.

In conclusion, there is a dramatic contradiction in industrialized countries between the need of male teachers and role models for boys and the absence of male teachers in the school system, in a general crisis of positive models of masculinity. This is the result of several decades without addressing the issues of boyhood and masculinity.

Even in Asian countries like India, we can find this pedagogic and anthropological bias. Quite visibly, modern India has forgotten its own admirable tradition, where the Gurukula played a major role, and it has just imitated the negative trends followed by the West without being aware of the troubles manifested there.

In front of the problems produced by coeducation –especially for boys- it is necessary to underline the deepest significance of the Gurukula –not only in India but virtually in all former civilizations-; remembering that this community of the master with a small group of disciples around was founded on mutual respect, love and communion, and free inquiry with eagerness to learn.

Even in European Renaissance, the Jesuits perfectly understood this anthropological and pedagogic fact; by implementing an intelligent system of tutors with small groups of boys, they run some of the best schools of Europe, where many among the greatest minds were shaped, like Descartes or Voltaire.

In New York City, the Eagle Academy for Young Men has implemented a mentoring programme through which every boy takes a male mentor in the area.

The impact of the mentoring programme has been “beyond profound” in the words of David C. Banks, Principal. All the African American boys of this area of New York have improved academically and in general terms when accompanied by an elder male mentor. The positive male mentor is obviously complementary to a positive fatherhood –after the mother’s role, which will always continue but cannot suppress the need for the growing boy of the father and the male mentor together with peers-.

Our civilization denies the fundamental right of boys to have male role models in their process of growing up and to experience love, the most essential human value, within their own gender. Overruling mothers ultimately deny the male identity of their sons when the father’s role is diminished –especially in case of separation- while real mentors do not exist. Boys grow up with a lack of male role models and love within their own gender; love is already absent from male relationships, whereas women express much more affection among them. All this only nurtures alienation and violence within the male gender.

How many more jails for men do we want to build in “developed” societies? Many psychologists/ anthropologists have said that jails are places for father-deprived boys – father meaning in more general terms positive role models within the male gender, not only the blood father-.

“Boys can be especially tribal as they enter adolescence, and their physical development cries out for male mentors and guides. To have an all-male school work, the school needs to be rich in tradition and ritual. The school needs to be a sacred place. Wabash College, for example, is full of traditions promoting male bonding while channelling male energy into spirited and constructive purposes. Separation also creates and encourages a special bonding between members of the same sex. This is especially important today, when males are often not encouraged to articulate and express the full range of their human emotions and needs.” **Prof. S.H. Webb (Wabash College, Indiana, U.S.A.).**

“Defending All-Male Education. A New Cultural Moment for a Renewed Debate.”
(Fordham Urban Law Journal, vol. 29, Issue 2, 2001.)

As the history of mankind has proved through millennia, boys learn best –especially after 8/ 10- in a master-apprentice atmosphere –the Gurukula in India- under the mentorship of a positive male figure. They do not learn so well in a big co-educated class with a female teacher. There are anthropological issues concerning gender identity, coming of age and boyhood that have been totally overlooked by the culture of the last decades –focusing on girls exclusively while openly neglecting boys, with political arguments that have denied anthropology and reality-. Needless to say, the intra-generic dimension in the growing process must be interconnected with the complementary inter-generic domain.

Even if boys’ settings seem to be more suitable for the education of boys, while girls’ settings may also be suitable for girls, boys’ schools can create partnerships with girls’ schools for common activities of all sorts –arts, community service, etc-.

Moreover, boys’ and girls’ schools can share the same campus and gardens, and even, boys’ and girls’ classrooms can be arranged under the same roof.

The incipient awareness about the problems of boys' education and boyhood in general has already generated some studies and publications.

This kind of bibliography will develop in the near future, together with specific literature for girls' education. We enclose below a short sample of this new research and publication.

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- BRISTOW J., "Empire Boys. Adventures in a Man's World", Harper Collins, London, 1991
- GURIAN, KING, STEVENS, "Strategies for Teaching Boys and Girls. Elementary Level", Jossey-Bass, San Francisco, 2008
- GURIAN, KING, STEVENS, "Strategies for Teaching Boys and Girls. Secondary Level", Jossey-Bass, San Francisco, 2008
- GURIAN, DANIELS, STEVENS, "Successful Single-Sex Classrooms", Jossey-Bass, San Francisco, 2009
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- GURIAN M., "The Minds of Boys. Saving our Sons from Falling Behind in School and Life", Jossey-Bass, San Francisco, 2007
- GURIAN M., "The Wonder of Boys", Tarcher, New York, 2006
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- HAWLEY, REICHERT, TYRE, "Reaching Boys. Teaching Boys", John Wiley and Sons, Hoboken (NJ), 2010
- HILLCOURT W., "Baden-Powell. The Two Lives of a Hero", Scouter's Journal Magazine, 1992
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- LOPEZ N. (female author), "Hopeful Girls, Troubled Boys", Routledge, London, 2002
- MARTINO, PALLOTTA-CHIAROLLI, "So What's a Boy. Addressing Issues of Masculinity and Schooling", Open University Press, 2003
- NEWKIRK Th., "Misreading Masculinity. Boys, Literacy, and Popular Culture", Heinemann, Portsmouth (NH), 2002
- NORFLEET JAMES A., "Teaching the Male Brain. How Boys Think, Feel and Learn in School", Corwin Press, 2007
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- SAX L., "Boys Adrift. The Five Factors Driving the Growing Epidemic of Unmotivated Boys and Underachieving Young Men", Basic Books, New York, 2009
- SPIELHAGEN F.R., "Debating Single-Sex Education", Rowman and Littlefield, Lanham (Maryland), 2007
- TYRE P., "The Trouble with Boys. A Surprising Report Card on our Sons, their Problems at School, and What Parents and Educators Must Do", Three Rivers Press, NY, 2009
- WEAVER-HIGHTOWER M.B., "The Politics of Policy in Boys' Education. Getting Boys Right", Palgrave Macmillan, London, 2008
- WHITMIRE R., "Why Boys Fail. Saving our Sons from an Educational System that's Leaving them Behind", Amacom, New York, 2010

**A new Pythagorean school: more needed than ever 25 centuries later;
Consistent with the Socratic Academy of Plato or the Vedic Gurukula.**

The life and work of the Greek philosopher, Pythagoras, is like a landmark for all we want to do and acquires iconic value for the future of mankind.

Virtually no school/ college handbook mentions that Pythagoras learned philosophy, mathematics and science - and mysticism - in Egypt -which is completely normal, since Egypt was a great cultural centre at that time, and many Greeks went there to study-; but handbooks have forgotten it. Why? We will read even less often in common handbooks that -according to the biographies of his own disciples- Pythagoras went to India!

(Where, by the way, he would meet with the Buddha Himself).

When he came back from Africa and the East, Pythagoras was desolated by the limitations of the Greek society, so he fled to Southern Italy where he founded a school: not for adults / philosophers but for boys as young as 10 or 12; a real "paideia" deeply consistent with the "gurukula" of India –or the Socratic Academy of Plato-. This truly pedagogic aspect of Pythagoras -with young boys, with this pedagogic love typical of Greece and India- is again something that has been diluted in the standard presentations of the great philosopher of Greece.

Moreover, the Pythagorean "paideia" or "gurukula" deeply blended the East and the West -Greece, Egypt and India- within a spiritual world view aiming at sowing the seeds for a new -better- world inseparable from a new state of consciousness -higher and loftier-.

Pythagoras even suggested –like Plato- to transform politics in depth from the prevailing corruption towards something more ethical and noble.



Twenty-five centuries later, the humanistic dream of Pythagoras –or Socrates/ Plato- remains fully in force -more than ever-; after 2500 years the world has still not changed in depth. The world scenario is appalling.

Our educational project, "International Education for a New World", recovers Pythagoras' dream after 25 centuries, and recreates his "paideia" or "gurukula" in South India with a European background while aspiring again to this unity between East and West inseparable from a spiritual worldview, from that Socratic/ Platonic pedagogic love so akin to the "gurukula" of the Vedas and Upanishads at the antipodes of the school-factory of the modern alienation.

This is the paradigm shift advocated by quantum physics, which perfectly knows that the paradigm shift implies a shift in consciousness.

The conflictual and alienating extreme point reached by post-modern civilization is blindly heading for a collapse, as warned by the President of Czechoslovakia, V. Havel, before the Congress of the United States of America.

But, as the philosopher of science, E. Laszlo, defended with enthusiasm, the break-down may turn into a break-through. The key lies in consciousness, and this means EDUCATION.

This is the deepest purport of our educational project, "International Education for a New World."

This is the very heart of all our philosophical work half way between Europe and India.





“You are the master, you are the Guru.”

J. Krishnamurti.