



About education

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1. Introduction

Teaching is a key task for humanity. Learning and teaching are linked together. It is part of human being. We are all learning all day long and every day. We interpret everything that we see, and from those interpretations we make conclusions which we use afterwards. We know from experience what is going to happen as a result of our actions. This way of thinking is part of us, that is how human being works as a system. How amazing that education is usually viewed as a special and separated subject, ignoring that all of us are teaching and learning at all times. From our birth to our death, we are changing and progressing. We need to adapt to external and internal (psychological) conditions. As adults get older, their body is less flexible, their energy may decline, their brain is working less rapidly and so on, that is why ageing people need to adapt and to learn how to compensate all these deficiencies. In youth, it is the opposite : children and young people get stronger every day and they also must adapt to these new conditions. What was impossible a year ago is now possible : it creates new conditions to which adaptation is necessary. Everybody has experimented that the more we learn, the less we know, so that we have to learn even more. Nevertheless, studying is not considered as fundamental as it should be. Life is disconnected from education. We do not realize how important is adaptation for us. Adaptation is the very first step of learning. Animals are learning, human beings are learning too.

To address education is quite a huge challenge. Educators, teachers, professors but also parents, friends are involved in this process as well as the person being educated.

The author will try to point out the major issues of this subject. Understandably, a few pages cannot contain all details and issues of this matter, but starting with essential definitions and directions, we may offer at least a starting point, enabling every reader to continue and develop these ideas.

Teachers have many constraints and duties. I propose to list the main ones requiring to be controlled and improved. These are the following :

- authority
- stress and anxiety
- confidence
- relations with parents
- knowledge, control, updating of know-how
- values
- interrelation between children or young people
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A lot of debates might be raised about all subjects addressed in this paper, if the author did not start by defining the mission of education. What is a teacher's task ? What is Education ? Is it transmission of a knowledge, or transmission of values, or transmission of methods, or transmission of ways to adapt to a society ...?

These are typical subjects which are addressed when one talks about education. Endless discussions may arise if the terms are not properly defined and if the goal, the aim of education is not being defined as a starting point. Indeed so many professors, teachers and people are involved in education, that each of them has his or her own knowledge, experiences and know-how. I accept this, but I simply want to focus on the fact there is a link between what we can teach and who we are. Those are two parts of one single problem : how to transmit our knowledge ?

I propose to follow a simple and logical scheme, starting by definitions and progressing then step by step in two parts :

Part 1 : Fundamentals.

1. Why is education needed?
2. What is education ?
3. How to construct education ?
4. When is education ended ?
5. What task is assigned to teachers ?
6. How can teachers manage all constraints they have ?

Part 2 : How can teachers control themselves and improve their efficiency.

1. How to formulate personal problem ?
2. How to make introspection ?
3. How to correct attitude and become objective ?
4. How to improve coherence and harmony to be transmitted to pupils ?

2. Definitions

Authority : real authority is the recognition of a knowledge. No need to shout, no need to try to adopt an attitude, just be yourselves confident in your knowledge. This is the most important in education. Real authority comes from charisma. It is also linked with values of life.

Discipline : repetition of a process with which we agree. By example, I have the discipline to walk every day between 7 o'clock to 8 o'clock. As much there is a lack of values, as much there is a lack of discipline. Discipline should not be seen as an old system, it should be seen instead as a capacity of controlling ourselves.

Education : the action of transmitting a knowledge (memory and reasoning). In French language there are two different words, separating "education" (which was traditionally done at home by parents) from "instruction", (learning). Learning is entrusted to schools and universities and provided by professors, specialized in different fields. "Education" is about the way to understand life in general, including morals such as behavior in society. The English term Education embraces both meanings and, thus, does not make any separation between intellectual learning and education to life. Even in France, the use of these terms has evolved, and the Ministry in charge of schools is now called "Education" (not "Instruction") Ministry. This evolution from two different terms to a single one, "education", entrusted to the school system, shows how much parents neglect to take charge of education at home. Presently, many parents fail to educate their children, so that children grow up without any value passed from parents, from grand-parents. Later on, a lot of parents discover that even if their children have knowledge, that they have no values in life.

Exam : an exam should be a verification of the ability to make demonstrations. A demonstration is a logical reasoning for explaining something or a process. An exam can also be a check of memory, but although memory is useful, it is not mandatory to be able to make a reasoning. Unfortunately, most exams are not constructed as a test of capacity of thinking, they are only a pseudo-check of some knowledge. For example, the result of a QMC, proposing questions with multiple choices, doesn't mean anything about the real abilities of the student, it is just a notation done by computer

Knowledge : knowledge is an immaterial product which can be shared with everyone for free. The more you are sharing your knowledge, the more you learn and increase your own knowledge. Knowledge is an explanation of how something or a process works. By example, it is possible to explain why the sun rises every day in the east. Knowledge is based on two components : first, the ability to think ; second, the memory of facts that ease and allow the thinking.

Teacher : a teacher is someone who knows a little bit more than you. It doesn't depend on diploma or graduation, it depends on the knowledge he or she has and the knowledge you have. This is why someone can be for you a teacher in a field and you can be a teacher for him or her in an another field. This seems very simple but it is not evident to accept.

Value : this term is very wide and defining it would need a whole book. A full year is dedicated to this concept in the course of my institution (EHEPM) at the level of Master. Let us, nevertheless, try to define it : Value is a result of experimentation obtained by testing some ideas given by the

society, parents, religion or observation of life. Values can evolve during life, starting from a very first training at home then a reaction against parents and step by step progressing to be part of the individual.

3. Part 1 : Fundamentals.

3.1. Why is education needed ?

Education is part of evolution. Adults want to transmit their experience and children are greedy to learn. In fact all of us are making experimentation every second. By example while you are reading these sentences, you have at once a reaction that you want to share with someone, with the author because you don't agree with this text, or with your friends because you agree with it. You may also want to ask questions, to test if your understanding is right or not.

More than that, every one, regardless of age, has to learn, to understand things, to understand the world in which he is living. We don't need first to learn, we need first to understand. Understanding is in fact already learning. But to understand facts and processes we need teachers and pedagogy. If we learn how to think, then step by step we start creating understanding. We start creating added value in terms of knowledge.

Let us describe how it proceeds :

Whenever something happens, we want to reproduce it because it was pleasant, or we want to avoid it because it was unpleasant to us. No reasonable person could think that this event happened randomly. We seek to understand who or what has created it. It is inherent in human nature to seek an explanation.

The explanation can be anything from a guess to a scientific proof. It can be purely esoteric or based on a theory. The aim of the explanation is to be able to forecast or to predict in order to avoid something unpleasant or to start again something pleasant. Medicine is a good example of a half scientific and half empirical practice, whose aim is to heal suffering people. Sometimes doctors do not know why this kind of tablets is working, but they take the risk because most of the time it works.

For children, grown up people appear as magicians. How the "magician" makes it happen doesn't matter. For example, I remember my children breaking a toy and saying : " It is not important, anyway Daddy will repair it". Children need explanations to feel secure and protected. Whatever they imagine, this imagination brings them calm and protection. How often do children come back from school repeating what the teacher said in classroom as if they knew now how the world is running. At a very young age they just believe the teacher, then they start to understand, then they criticize what they have been told. This is the normal process. We so often forget about it. We adults think that if we know something it is true. In fact nobody knows what is reality itself. This is a philosophical question. Platon has illustrated his theory with the myth of cavern, showing us that what we see is a projection of reality, not reality itself.

We can successfully explain many aspects of the reality, but we will never be able to know why it works. We have to stay at the level of understanding how it works.

This is a key point for teacher to keep in mind. What teachers try to transmit as knowledge is just the knowledge of the present understanding of Nature. Keeping this in mind creates modesty, something that is too often forgotten.

What is education ?

As the concept has been previously defined, it is a transmission of knowledge. But the aim of education has now to be more precisely defined.

First of all, it is necessary to define the mission of education :

The aim of education is to help people, and especially children, to become independent, to be a valuable human being. By example, teaching children how to read, in order to make them autonomous in their readings, to be able to read by themselves books, computer screens, labels or any other written text.

To reach this goal, it is necessary first to rise interest for the children of young people. Without interest it is impossible to attract attention from pupils or students, and without attention they can't focus on the issue.

It is necessary to create a dialogue, because children and young people have difficulties, have questions, have desires and so on, which need to be taken into account.

But this is not what governments want. They mostly want obedient citizens, able to obey orders like soldiers. This is in contradiction with education. This can explain, for example, why in USA the education is not structured at all, it is compartmentalized. This creates specialists who are not able to think globally, so that it is very easy to control them without their notice. I can give you the example of an educated American, asking a banker from Luxemburg, what could happen to his money if Luxemburg would invade the USA. (May 2020). Another example : an American asked me if I would return to France by train from the USA. The third example is an American (a 40 years old Director of a medium firm) who asked me if it is true that in Europe different languages are spoken. It could be funny if it was not true. What I want to show by these examples, is that people's knowledge can be deconstructed by this kind of educational system.

If a definition of education is not given first, no problems about its goal can be solved. According to me, education is the process destined to make people responsible of what they do and able to think by themselves. This is far more important than to be able to recite or repeat the contents of a dictionary. Confusion between knowledge and memory is too frequent.

Education has to be structured, as human knowledge should have a spinal column on which new knowledge can be added step by step. Everything has to be connected to each other. Education refers to culture and culture refers to values.

So it is necessary to define culture and values.

Culture originally meant the cultivation of the soul or mind, acquires most of its later modern meaning in the writings of the 18th-century German thinkers, who were on various levels developing [Rousseau's criticism of "modern liberalism and Enlightenment."](#) (Wikipedia)

This definition enables to see that education and culture are close together because both are related to the cultivation of the soul or mind. Talking about cultivation shows that something is growing, something which can be planted, something new. Education can bring something new or grow something inside the educated individual. This "something" is values. We all have values which need to grow up to develop, and sometimes we need to change them, to introduce or reintroduce new values inside us in order to change our vision of the world.

3.2. How to construct education ?

Education is not to be realized in a single day, it has to be constructed as an edifice, as a building. First let us start with foundations. How to read, to write, to calculate. If foundations are not solid, it is vain to try going on. In some cases, it is better to start again from scratch, regardless of our age : don't be ashamed to start again from the beginning.

Once you know that it is necessary to build foundations, it is obvious that these foundations have to be solid, that is to say, coherent. Once the laws of internal world are known, one can apply them to understand children, students. The method is the same as in physics. Just begin with describing a few laws and apply them, in order to get acquainted with this new field of investigation : internal (psychological) world.

It is important to teach new concepts and to verify if students, or children can understand them. When I talk about construction, I mean a real construction process. It is a construction of our thought.

First a stone has to be set, on which the science of internal (psychological) world can be founded. This stone is like an axiom, something that can not be demonstrated but which is obvious. The first evidence is that all human beings, regardless of religion, culture, or age, seek satisfaction. So every individual has to calculate what action will provide him or her the best satisfaction. This is obvious. Everyone whom I have met was seeking satisfaction. I have met a lot of unsatisfied people, but everyone was seeking satisfaction.

As in physics Nature always optimizes the energy, in our internal world, we should also try to optimize our energy. Here is the problem to be solved. Until recently, nobody knew what to do to succeed in this research of optimization. Now we have the means to know, making a calculation by applying the laws of internal world. Applying these laws works for any human being.

From this stone, now some very simple laws may be added. Step by step new concepts and new laws will be introduced as it is done in physics.

Let us start with the very first law $E=I$, exaltation = inhibition. As soon as an individual is in a state of exaltation, he or she falls into an inhibition. Why is there such a law ?

For the set of our satisfactions (or unsatisfactions) made by exaltations, inhibitions and satisfaction let us say E , $E = \{E_i, I_j, S_k\}$, we have for all I, j, k we have $S_i + E_i = I_j + S_k$ which can be written as :

$E_i = I_j + S_k - S_i$ or $E_i - I_j = S_k - S_i = 0$ because Satisfaction can't be equal to an exaltation nor an inhibition by definition.

Knowing and applying this law already enables to help 90% of people, including ourselves. Science is unlimited. This new knowledge of internal world is wonderful !

Education has to be taken as a construction, keep that in mind when you are teaching because it is mandatory to show that everything that is taught begins with a starting point and develops consequently. To show that every thing we say is coherent, and that it makes knowledge as a whole. Seeking for coherence enables to construct education.

3.3. When is education ended ?

Education never ends because life is in movement. Technology is changing, values are changing too like the world which is in a perpetual change. We need to re-educate ourselves to get updated. If we believe that we know enough and that we don't need to check if our knowledge is up to date, then we rapidly get old and not effective.

It is important to explain this, because formerly people considered that education ended at the age of 16 or 25. People are reluctant if they have had bad experiences with education, which happens very often. Education is most of the time confused with acquiring diploma. People seek a piece of paper which they will retain all their life as a proof of their ability. This is very confusing because the purpose of education, which should be a joy, is transformed into a duty, a task, a burden.

Education is like a momentum. Pedagogues have to start the movement, then once the pupils or students get enough momentum, they can go on by themselves. What is this momentum ? This momentum is analogical to the needs of training in someone who has started to do sport, by example. By teaching someone to think, you create in the mind of the pupil or student a need of more and more comprehension. This need is like a momentum. The second reason is the satisfaction that is to be found through understanding things and events. This satisfaction, which is provided by the feeling of controlling external or internal world, creates energy inside us. This energy can then be used again for understanding another event and so on : the momentum is created.

This is why the more you learn the more you want to learn. This is true only if you find satisfaction from understanding. If you don't really understand, then you can't get any satisfaction and the momentum stops.

Now let us explain how to find satisfaction through understanding. It comes from the ability to control things. The control is linked with the prediction. If you can control then you can predict. Prediction is, in a way, like being a magician, which everybody wants to become. It creates a satisfaction. So when you educate someone, you should find out the way of giving him this control and ability to predict the effects of given causes. You need to give example yourself, and to ask him or her to experiment what you have been teaching. It is an important part of the teaching process, added to the first one which is listening. Teachers need to listen to the one they are teaching, because it is their feedback. Without feedback you don't know if what you said has been understood and understandable or not. It sets the question to yourselves : Am I right ? Do I fully understand myself what I am saying ?

This is the kind of questions one often wants to avoid. One is afraid to answer this question. But this is the foundation of teaching : am I right ? Do I really know what I am talking about ?

If we avoid this question, then we may repeat our course without energy, without conviction , without interest.

And -going back to the beginning - without interest there is no education, no momentum can be created, no satisfaction, no happiness can be acquired through education.

3.4. What task is assigned to teachers ?

First : to listen to children or young people. This is the most difficult thing to do. To listen to people you must have a real feeling of freedom. If you are stressed because you don't have enough time, or if you aren't interested in listening, then you can't listen. You might stay and hear people but you will not listen to them. When you start listening to people, you start learning. The more you listen , the more you learn.

Second : to raise interest in comprehension. The aim of teaching is to answer the questions of pupils or students. If nobody asks any questions during a course, it proves that this goal has not at all been fulfilled. One should learn why things are like they are, which is a way to calm ourselves. We learn because we want to understand. An explanation has to be plain and to the point. An explanation has to be a demonstration. If it is not based on demonstration, it is only a belief. Beliefs are not what we need, we rapidly get bored with them. And why should I believe this teacher rather than someone else ? Beliefs are against science. Science demonstrates.

Third : to share knowledge. Knowledge brings pleasure and satisfaction. Once we understand something, we want to share it with other people. It is natural, because understanding something makes happy, and happiness creates the need to share it with other people (first with the ones we love then with others). Real knowledge is not a memorization of data but the ability to make demonstrations and to explain why things are what they are.

Fourth : to make experiments. Finding examples or demonstrations is a very difficult task. It has to be related to the teacher's own life, to his or her own level of understanding. It is a key point of teaching-learning. An experiment always contains a certain amount of suspense : will it work ? Why do we need experiments ? Because once we have really understood a demonstration, we want to experiment it and we start explaining it to others. For example, when children come back home from school, the first thing they tell is often : "Mummy now I know why...." or "I want to tell you what we have learned today... teacher said" This is enthusiasm. This is what teachers need to grow.

Fifth : to show that you use the knowledge that you are teaching, that it is useful. This is in fact the most important thing to do, because no one will trust you if they doesn't see the interest of learning what you are teaching. I remember, for example, that in an exam of physical quantum, I was asked a very simple question : why are carrots red ? See how our professor was clever ! He asked a simple question because physics have to solve common life problems, it should not be a mere theory disconnected from reality.

Teaching and learning are inseparable. It seems funny to tell adults that they should listen to a child or to a student. But whatever my knowledge is, I always learn from my students, just by asking myself : why did he or she ask this questions ? Or by thinking : here is a different point of view from the one I had expected.

Seeking to learn, you also realize that it is very difficult. One needs a strong concentration, and a lot of energy. Nothing is simple especially if you discover it.

3.5. How can teachers manage all constraints they have ?

Everything that we have defined needs a lot of attention and needs to determine priorities. If priorities are forgotten, then we get lost and a lot of problems arise.

To solve a problem, it is necessary to write it down first. Then we have to analyze it and search if there are any contradictions. This work doesn't take long but it is mandatory to be able to solve the problem.

By example : students are making noise now in the class and I can't take over. This can be a problem. Once it is formulated like this you can start analyzing it : Here, there is a fact : noise in the classroom ; there is also a feeling : I can't take over. I can't change the fact as such, because it is external to me and it doesn't depend on my own will. But I can change my feelings because they depend on me. If you can't take over, then you are frustrated, you loose your control, you are depressive, you think that you are a looser, and so on. As you see, you rapidly begin to loose more than control, you also loose confidence in your capacities and strength. This is what is to be changed. Because if you show any weakness, then students will abuse and continue, they will no longer respect you. "Change yourself and you will change the world". As a starting point, accept the fact and define it as something external to you. Then write down how much you are vexed. Then, once it is done, wait a while and come back again to what you have written. You will see rapidly how much you were exaggerating your trouble. This exaggeration is the source of your feeling of trouble. Diminishing this exaggeration will give you back the control on yourself. We all exaggerate our troubles because we like to to start complaining, we find satisfaction through complaint. But this satisfaction is a lie. What the Dielian method (which I call "mathematical psychology") proposes is to change a false satisfaction into a right one, which is to be objective. As soon as you recover from your inner lies, you feel confident again and it is visible by others. Once you are not affected any more and can not be affected again, everyone sees that, and your authority is back.

To teach you need to be ready to answer all sorts of questions about any subject. Things are connected with each other. This is why it is necessary to be coherent. If there is a lie somewhere, then coherence is lost. If the teacher can't answer a question or has no time to listen to questions, then he or she looses authority. What is the most important for a teacher ? To establish a contact, to build trust between pupils or students and teacher. Without trust, there is no way to start teaching, there is no way to start listening, there is no way to learn.

So what is the first priority ? The first priority is to be available. Paying attention to students is more important than teaching them this point or that one. If you don't pay attention to them, they will not pay attention to you and to what you are saying.

For sure there is always a program established by the authorities that you have to respect. But honestly whatever the program is , the aim of the course is to explain the spirit of your lecture, not to go very much into details. Most of professors, teachers and pedagogues pay too much attention to details instead of explaining why this has to be understood. Having a more global view can solve a lot of constraints and bring more interest than describing this or that into details.

4. Part 2 : How can teachers control themselves and improve their efficiency.

4.1. How to formulate personal problem ?

As simple as taking a pen and a piece of white paper, you just have to write down what is in your mind. It is actually not so simple, because our vanity stops us. It is always difficult to admit our fault. We see our fault but we don't admit it. As soon as we see our fault, we try to justify it instead of admitting it and defining it with precise terms, with a clear formulation.

What is the role of formulation concerning the problem we have ? It is meant to describe the feelings we have, the uneasiness. When one has a problem, one suffers. That is what we have to describe first : our pain, which is internal pain, something that no one ever speaks about, because it solely depends on us.

By example, when we are frustrated , we do not suffer from an external pain, it is just a feeling to be oppressed or stressed. But this internal pain should be recognized as the worst that can occur, as it is very painful indeed. To define and thus reduce this kind of pain, we need to write down all that happened as facts, not as feelings. It means, to write down facts without assuming what other people might think and without affect. By example, if someone shouted at you, saying that you are stupid. You have to write down the pure fact which is : "someone said to me that I was stupid". Do not add any description of how it occurred, do not report the gestures, the feelings, the mimics. Then you can start objectively analyzing this situation and find out the conflict inside you, thus enabling you eventually to solve it.

The formulation of your feelings has at first to be rough and direct. There is no need to try to find special words, just write down what is coming to your conscious mind. ("I hate this person, I was so pleased to receive this compliment, he smiled to me, he shrugged his shoulders when I was talking to my boss").

Once you have written everything which is spontaneously coming to your conscious mind, it is possible to start analyzing it.

I now wish to explain what can be done, in case we have a feeling of something confusing, preventing introspection, blurring the perception of what is going on inside our brain. Consciously or not, human beings make introspection all day long, but they also suppress many emotions and thoughts. If this act of suppressing is too often performed, remembering what we were thinking of becomes impossible. This suppressing act has become an automatism. It has to be broken, to rebuild the ability to remember our thoughts and then start an objective introspection. How to break this automatism ? A thing can be found only if we know what we are looking for. For example, if you enter a room without knowing what you are looking for, then you will not find anything. But if you know that you are looking for something blue, the size of a matchbox, cylinder-shaped, then you will rapidly find it. I propose to do the same with methodical introspection. I suggest to catch ideas and feelings coming out of your subconscious mind. By and by, you will notice that you become able to remember what is going on inside your brain.

4.2. How to make introspection ?

Introspection is the next step to be followed after the pure description of facts. Introspection concerns our feelings, our affect : the way we have reacted to external excitation, including the way we have reacted to other people's behavior towards us : accusation, or sentimentalism, excessive guilt, or vanity.

There is no need to talk openly about our feelings and our affect. You don't have to tell other people about them, introspection concerns only yourself. By example being vexed, or being arrogant about a success, or being ashamed, and so on... You just have to write it down and start analyzing the sentences to find out contradictions, revealing inner conflicts.

Introspection also has to be written. False motives are divided into four categories as said above : vanity, excessive guilt, accusation and sentimentalism. The two first ones are related to my inner self (I compare myself to an imagined standard, thus undervaluing or overvaluing myself), while the two others categories are based on comparison with other people, also with overvaluation or undervaluation.

All psychological problems come from the fact that we compare ourselves all the time, either with other people, or with an imagination about who we want to be. This comparison creates jealousy or anger, sentimentality or accusations.. Why is it so ? Because comparison leads us to feel other people either better or less valuable than ourselves. Once this difference is felt, we focus our attention on it, forgetting our own qualities. This difference is used as an explanation of our discomfort. This explanation is misleading, because the discomfort truly comes from us, from our point of view about ourselves. We seek to avoid taking responsibility for this discomfort, thus we make use of external facts, trying to prove that they are the cause of it. This process is called false motivation, a pretext to deny our own responsibility because of vanity.

Making such an use of an external fact or of other people's behavior is like finding a scapegoat. But this scapegoat is out of our control. Thus there is no way to correct our situation : we are convinced that it doesn't depend on us.

The process of comparison always involves overvaluation and undervaluation. We are no longer objective. We interpret the reality, we change the reality, we don't see the world as it is. This interpretation creates interpersonal conflicts, because our point of view necessarily differs from the one of other persons. It becomes impossible to agree with others, we start arguing, discussing, justifying our attitude, our point of view, our judgments.

Understandably, this process leads to all kinds of trouble. The world becomes hostile towards us, as if it was acting against us. We feel alone in our nervousness. Fortunately, it is not so difficult to change this pattern. Sometimes, changing a few words is enough to put our self appreciation right again, or to change our point of view about a professional situation. As a consequence of this new point of view, we dismiss the wrong impressions we had, and we transform our world from hell to paradise.

Moreover, we no longer depend on things which are external to us. In accepting full responsibility, we gain full power, full trust. We start controlling our life, our mind. We henceforth enter into a new world. A world full of potentialities, full of hope, a world where everything is possible within the limits of reality.

4.3. How to correct attitude and become objective ?

Dissociating affect from facts is the starting point towards becoming objective. This dissociation can be obtained in describing events as pure facts. Another technique could be to tell your story to someone while looking steadily to the regular movement of objects such as a metronome or a watch. By doing this, objective representation of facts can be dissociated from affect. But this first step is not enough to attain objectivity. Our inner attitude is to be changed by understanding our faults and, moreover, our misleading justifications of these faults. Individuals always seek to prove they are right. This is why we all try to justify our deficiencies, by giving explanations which are lies.

For example, I am late because there was traffic jam on my way. Although there really was a traffic jam, it is nevertheless a lie, because the real cause of my lateness is not having considered the probable occurrence of traffic jams. I knew there could be one on my way, but I did not take this knowledge into account, so I left home too late. To use the traffic jam as an excuse is a lie, although it is presented as something right. In psychological terms, this process is called false justification.

False justification looks like reality but is not. Using this justification, we assume that we are not lying because it could have been true. Justification can be defined as pretending to give a right explanation to something which is not true. Doing this, we believe in what we say, even if in our deepest inner self we certainly know that what we say is untrue.

This is why formulating our problems is necessary to look for lacks of coherence. It could be a lack of coherence regarding space, or regarding time. Or it could even be coherent, given other initial conditions. We usually forget to tell about initial conditions.

Human mind is a whole, including many components. We too often see only the components without viewing the whole system. This suits our misleading tendency to overvalue one component or another, instead of making the whole coherent.

Each component may seem coherent in itself, while being in fact incoherent as a part of the whole. To be objective, we have to take into account all consequences of our thoughts and acts. Not only at the present time but in the future, also taking into account the past. We live in a continuity. When we think about an issue, we have a tendency to see it within a short range or as isolated, instead of considering it as part of a whole.

Why do we most of the time avoid viewing ourselves as a whole ? Just out of laziness. To consider all the aspects of an internal and external situation takes a certain amount of work, which we are not ready, and even reluctant, to do.

4.4. How to get coherence and harmony to be transmitted to pupils ?

You can change the world ! By changing your point of view, you change the world you live in. In Physics it is said that two masses attract each other, thus masses are changing the space-time of Universe. In our internal world, which is in connection with other people's internal world, we can say that each one is modifying the space-time of our relational Universe. An individual in a state of internal coherence represents a tremendous attraction for other people. This can change the world.

Once you understand that human being is a whole, whose components are organized within three main fields (sexual, material and spiritual) which have to fit coherently together, you can enter a process of harmonization. Harmony or coherence in our acts and thoughts is visible by other people, there is no need to talk, just to experiment it in ourselves.

This harmony is communicative and procures a wish to feel the same. This is the only right way to transmit harmony to pupils or students. Nothing else than experimenting harmony can induce people to like harmony.

We can only talk about what we are personally experiencing. If we are in disharmony, everything we say will be affected by our internal inconsistency : irritation, submission, anxiety of other people's opinion, arrogance, presumptions, prejudices, and so on...

I have permanently to question myself : "if I say this, would it be in harmony with what I said yesterday and what I will say tomorrow ?" Values change and evolve, but harmony remains intact.

Coherence is a whole, creating a feeling, a mix of energy, happiness and calm. It is emotion towards life. This emotion can't be formulated, it can be only felt. It makes us modest and tolerant.

Having this emotion inside us, nobody can stop us, nobody can disturb our trust in life, our confidence in natural laws.

This confidence is based on the comprehension of the laws of internal or external world. The laws are coherent in themselves, together they make a whole. They are linked together by the theory and by the reality, in this resides their strength. This is why nobody can stop them operating. Laws operate in external and internal world. Knowing about it provides confidence. Ideas are traveling even more fasten than the light because they are everywhere at the same time.

There is no distinction between reality and science. Science describes reality and reality exposes its organization as a set of laws.

In this sense, every knowledge is science, it is what is used to educate children and young people and to re-educate ourselves. Pedagogues are scientific people. They know something about the laws of internal world as external world, even if they never told you about it. It comes from observation of students, children, parents and life.

I express my deep respect to these people who transmit the capital of cultural know-how to others. They are doing such a great job, and gaining such modest success. Each of us should be more attentive to their work, their patience, their skills.

5. Conclusion

Education has to start with self-education first. How would it be possible to teach anything, without having learned it before ? To teach, whoever we are, we need not only to know the subject to be taught, but to apply this knowledge to ourselves.

Education is the most beautiful task, because it refers not only to others but first of all to ourselves. It is a permanent discovery of our external and internal world. By teaching, one can progress every second, every day. Interest is the motor. We possess our own motor. In any field, new techniques, news concepts, are to be discovered, we can also learn the history of this knowledge. Our research can never end, because history never ends.

Writing these pages have brought me plenty of ideas, opening for me a new field of reflection. It has been a pleasure to introduce the readers to what might be a new way of thinking about education. I love to pay attention to very young children (under 7 years old) because their enthusiasm to learn is so strong and they feel such a satisfaction to understand (even if they don't truly understand yet, they understand that there is explanation).

The need of understanding is the basis of our brain development. Don't you remember when you were asking "why" every second about everything?

I have just a question to ask the reader, a question that you may ask to yourself : "what do you remember from your studies ?" Most of us remember very few of what we were taught. If it is so, why do we pay so much attention to all the little things and details we try to convey to students ? What is truly more important, details, or the way of thinking ?

Answering this question can calm our anxiety and provide students with the essential of knowledge, which is comprehension. Because everything can be forgotten except comprehension. I have practiced a lot of mathematics and what I mostly remember is the fact I can find again what I need, because once a demonstration has been understood, it can be done over again : I can rediscover it instead of remembering it. My mind is not like a computer's memory, I can compute myself. This is why I have never stopped practicing mathematics.

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