Holoversidad as a model for the University open systems

Julieta Valentina García Méndez
Universidad Nacional Autónoma de México

Abstract

The *holoversidad* is a model for university level education, it seeks the new meaning of perception, knowledge and social practices. The *holoverso* is the joint of multiverse, ie. all possible real universes, parallel, imaginary, present and to come, which proceeded from the curricula and training deployment; the anthroposphere and the biosphere.

Open systems are enriched with the concept of feedback, which refers to the processes by which corrects the path to achieve certain objectives. And that correction systems to achieve their goals, is done by self-adaptation or self-regulation of their behavior, or restructuring phenomena of each system.

The substantive functions of the university are in multiple actions; *holoversidad*, is an educational project, expressed the most relevant categories (holons) deployment in communities *ecosóficas* (generalized interaction) and holistic (relational hierarchies) which allows to display projects teaching in an informative and educational.

It is introduced the *holoversidad* institutional model for top-level education and Open University system. While, it is true that education as a social fact is the transmission dynamics of the culture of an older generation to a younger generation, modern states have a responsibility to public education. And since there is a private area, the school is an institution that allows meanings to knowledge and social practices.

The substantive functions of the university are teaching, research and extension of the benefits of culture to quality population and are expressed in multiple actions, mention the most important:

> • Serves organized social demand for higher education, specifically "a university UNAM is proudly public, secular, popular mass"[1] like many other autonomous universities that operate legally in the Mexican national area. Conversely those who enter must do so to make the most personal, appropriate and make a subjective rigorous and deep heritage, for meanings to their life trajectory. Its graduates are aimed at addressing the priority issues (education, health, housing, and safety among others) the national and planetary.

Mexico needs (...), engineers, (...), scientists, new careers, increasingly underpinned by technological developments, but I still think and I am absolutely convinced that Mexico beside them still need philosophers, poets and theater directors, and scientists social.

These disciplines, the humanities and social sciences, urgently require renewed support in the national context, because they have been gradually displaced by others that only have, at best, minimal expression in current joint labor markets.[2]

> • The University learning contents are legitimized by the philosophy, science, art and technology, but in turn the university not only transmits and preserves, also produces and reproduces. The university is opposed to common sense, the doxa ...

Not exist ... some order in ideas if there were also things or state of things a anticaos goal: (...) when the encounter of things and thought, it is necessary that the feeling is played as the guarantee or the testimony of their agreement, the heaviness whenever weigh cinnabar, the red every time I contemplate with our body organs not receiving this without imposing conformity with the past. This is all we ask to forge an opinion, as a kind of "umbrella" to protect us from chaos. (2005, 134)

[1] Principles relating to the movement of 1999 - 2000 the CEU.

[2] Speech UNAM rector, Juan Ramon de la Fuente, during the delivery of a recognition that made the College of Mexico. Mexico City. August 23, 2007 [http://seminarios.colmex.mx/videoseminario/ponencias/ponencia.doc. Reviewed by JVGM October 8, 2007]

> • In the University is not enough that students are aware of the results of research, read literature or science, transcribe the fundamental ideas, it is also necessary to research, design, invent, and build, speak and write, it is urgent that find the naturalization of doxa, the knowledge of daily life and the naturalization of social practices learned in the spring atmosphere of privacy.

From all this we make our opinions. But art, science, philosophy require more: draw plans into chaos. These three disciplines are not as religions that invoke dynasties of gods, or the epiphany of a single god to paint on the umbrella a firmament, like the figures of a Urdoxa3, which derive our opinions. The philosophy, science and art require tearing apart the sky and want us get deeper into chaos. Only at this price will win.

The three disciplines come by crises or shocks, differently, and the succession is what allows us talk about "progress" in each case. It would seem that the struggle against chaos cannot occur without affinity with the enemy, because there is another struggle that develops and becomes more important, against the opinion however that sought protection from the chaos itself.

In a wildly poetic text, Lawrence describes what poetry: men incessantly manufactured umbrella protects them in the bottom of which draw a firmament and write their conventions, their opinions, but the poet, the artist, practicing a cut the umbrella, ripping the sky itself, to input a bit of free and windy chaos and to frame in a sudden light a vision that emerges through the tear ... has three daughters chaos depending on the plane that cuts: are Caoideas, art, science and philosophy, as forms of thought or creation. Caoideas called realities produced in planes that section chaos. The junction (not the drive) of the three planes is the brain. (Deleuse: 2005, 202-204)

This proposed model of *holoversidad*, is an educational project and expressed the most relevant categories (holons) and its deployment in communities as a *ecosófica* organic strategy (generalized interaction) and holistic (relational hierarchies) which allows to display a pedagogical projects formative and informative manner.

The model is subsidiary *holoversidad* of utopia, while it shares its components (philosophy, science, art and technology as priority cultural expressions) and its rationality (the fantasy of a better world for every one). The *holoversidad* as university open systems model is explained and project.

If current physics is proposing multiverse model is presented as Deutsch (1999, 233) and the world of philosophy proposes fractal model to explain the reality, with the model we are proposing the *holoverso* it is a *holoversidad* as sustenance. The joint is *holoverso* multiverse, biosphere and anthroposphere, ie. all possible universes real parallel, imaginary, present and to come, they come from the curricula and training deployment.

The word "universe" has traditionally been used to mean "any physical reality." In this sense, there can be only one universe. We could keep this definition and say that the entity we are used to define as "the universe"-that is, all matter and energy directly perceptible around us, and the space is just a fraction of the true universe. Should we invent a new name for this small tangible portion. But most physicists prefer to continue using the word "universe" to refer to the entity as always, even if it happens to be now only a small portion of physical reality. A new term, multiverse, has been coined to describe the totality of physical reality. (...) The multiverse is divided into a

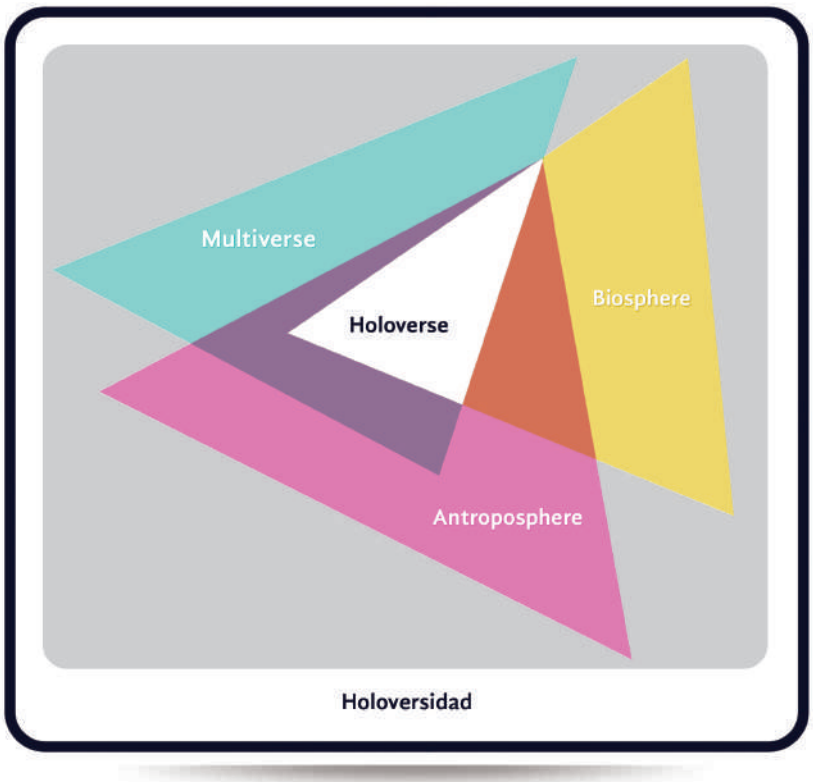

Figure1. *Holoversidad* Elements Model interactions

The anthroposphere realizes the relationship NATURA-CULTURE-FUTURE. The biosphere realizes life on the planet including Homo sapiens. The school is the perfect place to display subjects, caring for their bio-materiality, body shaping their character, and a body that is not made with interchangeable devices. Of a body that has life and death that the health-disease is a false choice. Life is not at the meeting with the disease. Life is an association to health, quality of life, not only to preserve contemplative. In fact the health and life seem to be an unlikely system, the more dynamic, more unlikely.

The school is a condnucive institutional body to prove that all complex skills can only be developed on the basis of a competition biocorporal allied to Hygeia no to Panacea. Where the disease, if it occurs, it is an event and not a destination in advance by *Las Parcas*[3]. That life-health is built on a *holoverso* in every possible between the macro, meso and microcosm. The needs are solved culturally and economically, thus encouraging further developments and cultural displays.

The school is the precise scope to combat prejudice and problematize, first the relationship of subjects with his body, his face and the use of pleasures, then the man's relationship with nature, but a living body, it consumes and excretes, kills to live, not angelic body sexless, sterile and contemplative, but a voluptuous body and aggressive with the environment. Also, the real environment is an environment for human life crossed, the urban environment, that metaphor of the human body is alive and has also predated the nature, the growth of the urban area, megacities, cities, towns, villages and hamlets, ie, all settlements are made at the expense of transformation and inhibition of the natural environment. Something we hard time explaining, but mostly live: human settlements are inherent holoverso (multiverse, biosphere and anthroposphere) but are not parallel, are interwoven to intersect and intertwine be unintelligible, but not stuck the anthroposphere the biosphere and the multiverse as a label or stamp is part of *holoverso*.

The *holoversidad* part of the following principles:

1. Recognition of man in me, which articulates and functionally displayed on your body (as experience ranges from being a body and having a body) needs, thought, feeling and will.

2. Recognition of the body such as construction and basic element in any human training or job creation. Where body and body systems are recognized as related.

[3] [Moiras Parcas. They are the personification of destiny of every human being, nor the gods can change. They were daughters of the night. Their Greek names were Clotho, Lachesis and Atropos and Latinos, Nona, Tenth and Morta. They attend the birth of every being, spin your destination and preach their future. Clotho was responsible for spinning the destiny of mortals. Lachesis responsible for rotating the spindle and randomly pull the thread of human destiny and Atropos which cut when the end came. Juliet Valentina Garcia Mendez http://www.webmujeractual.com/biografias/nombres/moiras.htm November 24, 2005]

3. The necessary link-World-Human Being Future.

4. Education, as an object of study, involves the areas of practical rationality, cognitive, logical and epistemological, and ethical areas, aesthetic, and ontological ecosophic. Where subjectivity operates several "records" of reality and subjective systems to be built organized.

5. Structuring the world-anthroposphere-like construction, as a set of complex relationships constructed from conflicts and struggles over spaces of action and power.

6. Elaboration of the subjective beyond the subject, as a result of a multiple process of struggle, conflict and passion.

7. Education as a social fact is different from a project-oriented education by teaching expressed specifically in school and college to the *holoversidad*.

Felix Guattari (1996: 18) says that if it is not, as in previous periods, class struggle or defense of the "socialist fatherland" of running a unique ideology, it is conceivable; however, the new reference lines indicate ecosophic reconstitution of human praxis in the most varied domains. In all individual and collective scales, both in regard to everyday life and to the reinvention of democracy, in the register of urban, artistic creation, sports, among others, is always interested in what could be devices ranging production of subjectivity in the sense of a resingularization individually and / or collectively rather than in the manufacture of a "mass-media" synonymous with anguish and despair. The perspective that does not totally exclude the definition of unifying objectives such as the fight against world hunger, the deforestation brake or blind proliferation of nuclear industries. It is said, it cannot be stereotyped slogans, reductionist, which remove most unique and other issues involving the promotion of charismatic leaders.

I argue on these lines the most important traits for building a contemporary pedagogical model to aim toward our future, towards the common good of all and sundry. See Figure 2

Figure 2 shows the weft and the warp of the most important lines for building a contemporary pedagogic model. Some of the goals of the general theory of systems are:

- Integrating natural and social sciences

• Find an exact theory of nonphysical fields of science
• Develop unifying principles (unity of science)
• Systems are sets whose elements are in widespread interaction, the main issue is to study organized complexity.

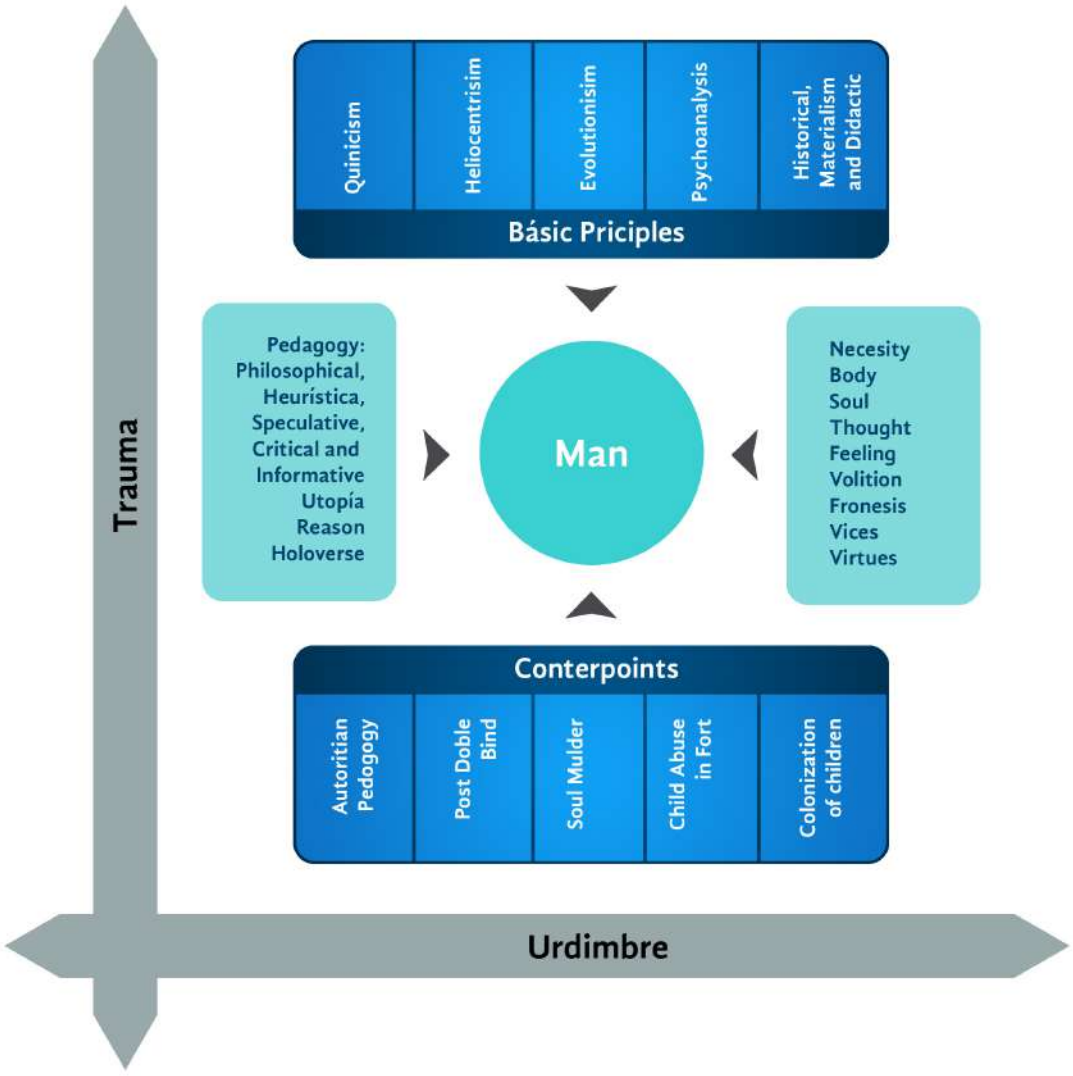

Figure 2.

Open systems or informed, enriched with the concept of feedback, which refers to the mechanisms by which corrects on the fly, the route to achieve certain objectives. And that correction systems to achieve their goals, is done by self-adaptation or self-regulation of their behavior, or restructuring phenomena of each system.

Open systems are those in interaction with the surrounding environment through the addition and removal of material, without reaching a steady state, but remained at a steady state. It is characteristic of these systems, the possibility of increasing and decreasing order entropy, since it tends towards a state of greater organization.

Who influences definitely search and refine the idea of General Systems Theory are the work of Fritjof Capra in his works: The Turning Point, The Web of Life and The Hidden Connections, among others, to realize the further development of especially since this theory shows how the models are able to live in contradiction and despite all the new changes. This is the case of the mechanical model and its coexistence with the quantum model, to mention the most important.

Capra (1998) also introduces the concept of living systems, not just open:

The intellectual tradition of systems thinking and models of living systems and theories developed during the first decades of the century, formed the historical and scientific conceptual framework that addresses this book. In fact, the synthesis of theories and models that propose here can be seen as the outline of an emerging theory of living systems able to provide a unified view of mind, matter and life.

But Capra goes further exposure in a model of the same features as the "Baker model". On the next lap, the same model as explanatory plasticity incorporates new elements.

The terms "holistic" and "organic" in their meanings differ slightly and it seems that the first one is less appropriate than the second to describe the new paradigm. A holistic view of, for instance, a bike means seeing it as a functional whole and consequently understand the interdependence of its parts. A green vision would include this, but add the perception of how the bike is inserted in its natural and social environment: where their raw materials come from, how it was built, how their use affects the natural environment and the community in which it is used. This distinction between 'holistic' and 'organic' is even more important when it comes to living systems, for which connections to the environment are much more vital.

Capra (1998, 45) also introduces concepts such as autopoiesis. Self-regulation and self-organization that exceeds that of the organization.

(...) The concept of organization has been refined to that of "self-

organization" in contemporary theories of living systems and how the pattern of self-organization is the key to understanding the essential nature of life.

In the latest work of Deleuze and Guattari (2005) What is Philosophy? we find concepts and notions that overflows Capra, demonstrating once again that everything is related to everything and that we can dare to go beyond the limits for a better explanation. Capra (1998, 142) highlights the usefulness of models to explain complex phenomena, without reducing them to absurdity to be understood, however, realizes a simplified complexity.

An iteration of this mapping operations will cause repeated stretching and refolding, much like those that made a baker with its mass, which is why this iteration is called, appropriately by the way, "Baker's transformation." As you move the stretch and refolding neighboring points of the segment will be displaced further and further apart, until it is impossible to predict what position will be a certain point after multiple iterations.

The concept of Capra (1998, 83) of dissipative structures and the difference between data and information are central concepts in the understanding of systems:

The term "information" is used in information theory in a highly technical sense, quite different from our colloquial use of the word and without any relation to the concept of 'meaning'. From this we have derived endless confusion. According to Heinz von Foerster, a regular participant in the Macy Conferences, this is due to an unfortunate error linguistic confusion between "information" and "signal" - that led to his theory called cyber and information instead of calling signal theory.

Interesting to note that in the crucial point, it also highlights the same Capra:

This is how modern physics reveals the basic unit of the universe, shows that we cannot decompose the world into independently existing smallest units. As we penetrate into matter, nature does not show us any isolated basic building block, but rather appears as a complicated web (sic) of relations between different parts of a unified whole. As Heisenberg put it, "The world thus appears as a complex set of events in which connections of different kinds alternate or overlap, or combine, and thereby determine the texture of everything."

In this sense all elements of a system having a double logic, while they are self-assertive, are relational.

The systems are sets whose elements are in widespread interaction, the main issue is to study organized complexity. The generalized interaction is what gives it its organic character. In that sense, we are working holon concept that is both the whole and the particle, in a self-assertive and relational logic. With this logic model is developed so that each element is likely to be explained like a everything, everything that makes sense in relation to all the other elements, or holons.

We assume moreover, that the assessment is given in that trajectory correction, ie. if my starting point is not clear to the end point B, we can make operation flexible and refeeding detours, but also capitalize the driving force that enriches our data, and these are the principles of assessment. See Figure 3.

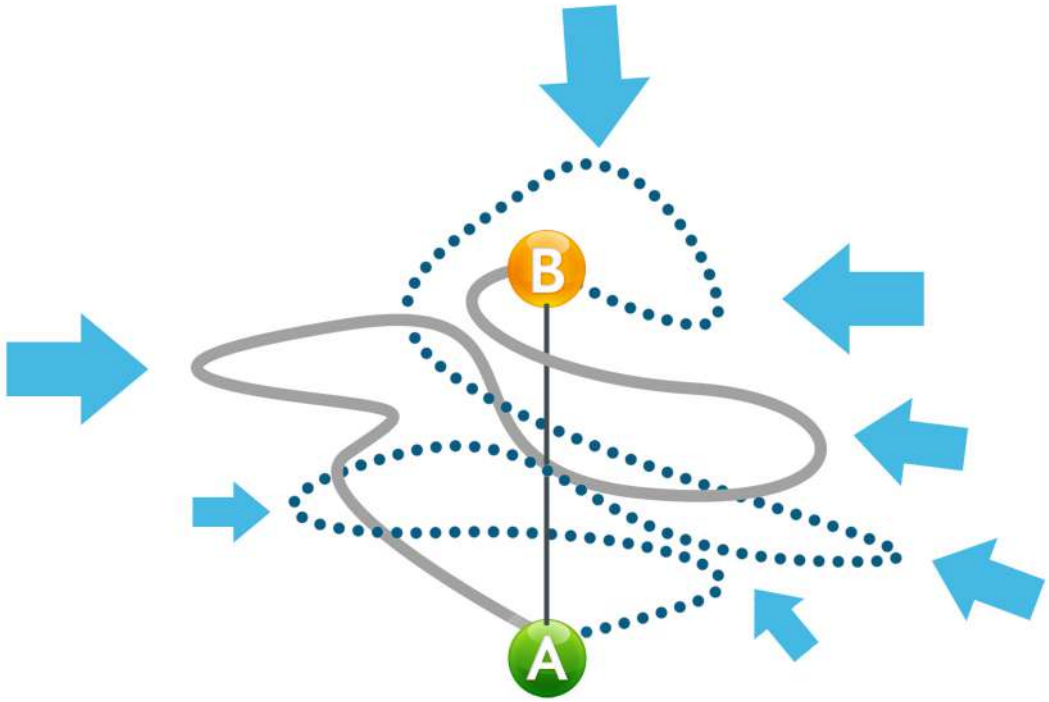

Figure 3.

In Figure 3, illustrating the principles of the evaluation, rigorous in purpose and flexible in its trajectory correction operation.

In closed systems, the final status is usually determined by the initial conditions, whereas in open systems, the same final state can be reached from different initial conditions and the same objective can be achieved in different ways. That's why this model takes as guiding the pedagogical model and proposes a relaxation practices to configure macro competencies and academic skills to make intelligible the *holoverso*.

In short, the open system concept is organized complex point where the system is represented as complex whole, the whole is more than the sum of its parts, delimiting the categories and their interactions for separable and restore them after the everything. The whole and its parts are treated with a logic synthesis-analysis-synthesis.

If one of the entities behave in a particular way should possess properties that produce such behavior and organizational rules.

Notion of model

The model aims to foster *Holoversidad*[4] discussion organized higher education in order to improve and innovate their knowledge and practices.

It is appropriate to note that the dynamic and complex nature of institutional education in this approach is the opportunity to be widely expressed, with an inclusive and diverse logic. When you're doing modeling reality appears more orderly than it actually is, but that's the challenge, to account for the complexity of a simplified basis of discussion and in guiding the educational institutional innovation trends rational knowledge and practices.

The model, then, is the product of the synthesis of various career paths in education are debated constantly.

Each category included in the model has theoretical and methodological inclusive logic; it is pulling together various positions in his explanation point to the diversity and the organic.

The construction logic describes a helix. See Figure 4.

[4] The concept model is always tied to theories; models in this sense can be interpreted as illustrations of the theories.

Represent reality in this model is the education provided by the institutions (formal education) university specifically, understanding that their graduates make up a network of networks in their employment.

It is an open model, dynamic, inclusive, flexible in operation, self-referential, self-regulating and certainly perfectible. It is assertive, while explaining the institutional educational and relational processes, because it maintains dialogue with the pedagogical model and practices deployed in terms of this model through ecosophic projects communities.

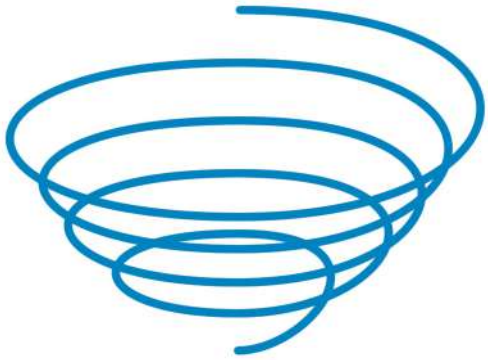

Figure 4. Helix.

At this point in development, it is the basis of the model center to enlarge gradually, with the contributions of its partners. See Figure 5.

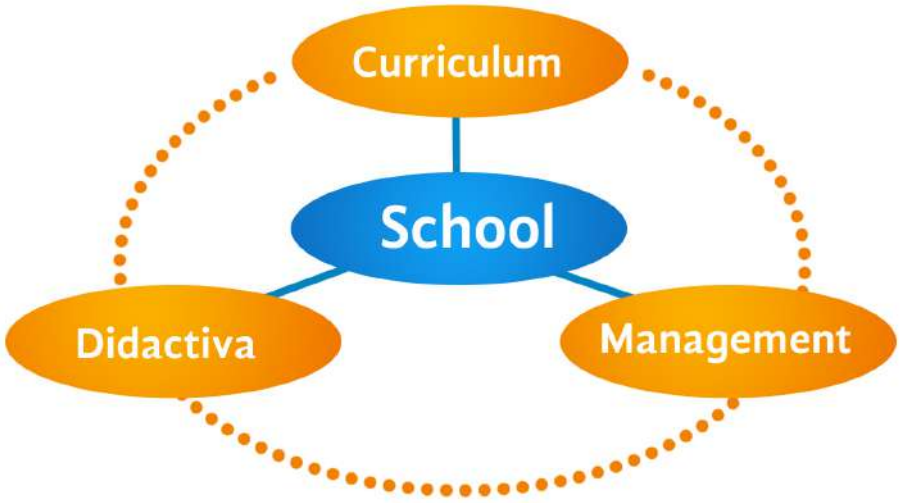

Figure 5. Main reference model

The reason

A basic concept as the reason that operates constantly in man is the reason joint has three poles of which are in tension and are according to figure 6

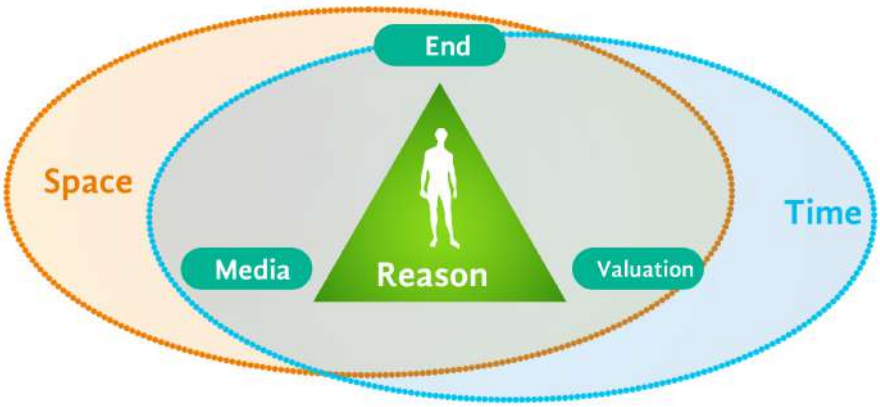

Figure 6. Reason and its three poles of articulation

In Figure 6, expresses: the ratio of articulation with three poles in the forming voltage and constitute the ends, means and assessing their axes in space and time.

The intent and purpose gives meaning to their action. The action itself aims to use means to achieve ends, invent, build, discover and perfect, assessment of both the end and the means. The interweaving of these elements impels man to seek new alternatives ... A reference space-time system.

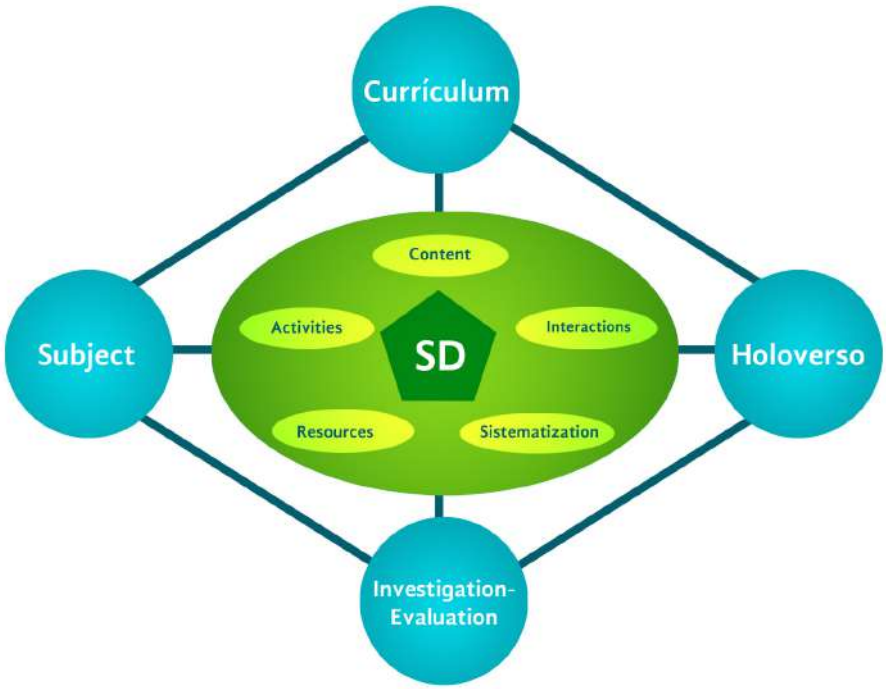

Figure 7. *Holoversidad* open systems model for university

Figure 7 shows the interaction elements *Holoversidad* generalized model for open systems university. The educational system in the center, above the curriculum, research-down assessment, subjects left and right side of the *holoverso.*

Curriculum

The school curriculum is negotiating space between:

- The state education policy, subjects, culture, cultural fields, and problems of contemporary local and global, and
- The university response, reinterpreting and imprinting their own propositional logic through institutional philosophy and in turn set their own educational policy. See Figure 8.

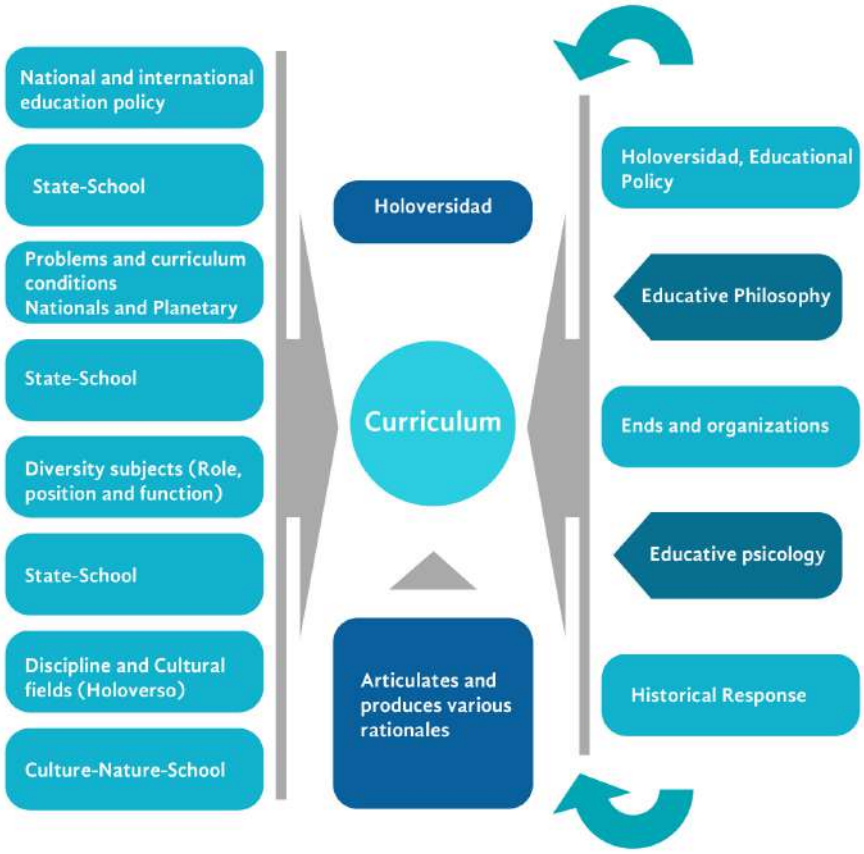

Figure 6. Reason and its three poles of articulation

The curriculum at the university expresses the spirit that historically based. It is the proposal coordinates and directs institutional purposes and institutional actions. The curricular approach expresses tacit or ostensibly an educational project and utopian philosophical affiliation. It is an expression of institutional intentions, as the objective and means of expression are the curricula. Each approach has its own curriculum content and it is named as embodied and expressed in the plans and programs of study are eligible.

Figure 9 shows a model for flexible and innovative curriculum, rigorous in its structure and flexible operation.

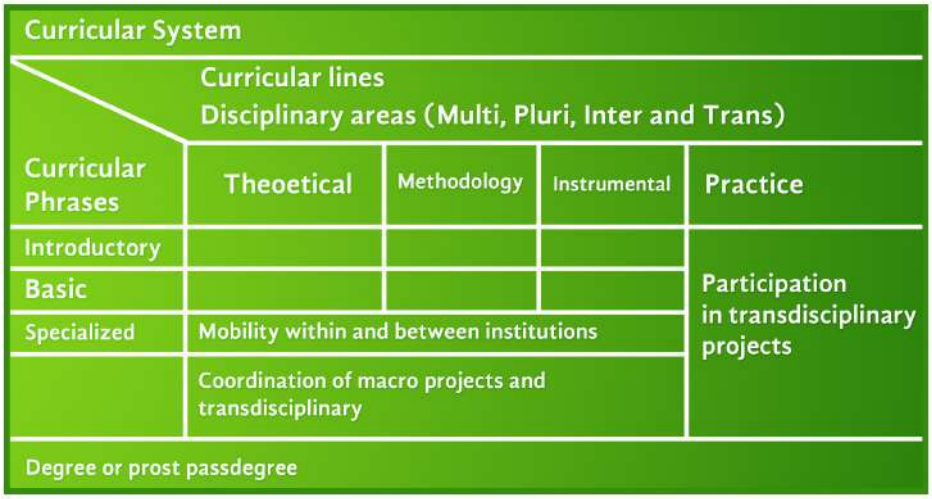

Figure 9.

The curriculum, as *holon* is both assertive and relational approach that guides the actions of individuals and corporate goals expressed by the general objectives of the various degrees and relational by its organic link with the educational system that gives meaning to orientation.

Management system, such as self-assertive and relational *holon* is under that, as autonomous institutions, universities legally have the power to organize and manage their resources, in turn, it must be accountable to the state. They are included in the management styles of governance (management or arrangement), management (planning, development and evaluation), and linking intra and extramural university with various social sectors.

Subjects

Subjects' category is a social formation in which the man is questioned by the school and is subject to his speech, speech begins with a cash aspiration for the mere fact that the university is there. Once inside, the institution gives to the subject roles, positions and functions. Only the position is not interchangeable because it is the only place that each individual has in the institution and in front of it. When man can not submit to the institution or the institution leaves or throws. College is not a total institution so it is a college dropout speaking too, because they always have the option to leave if they wish to return. Furthermore, permanently or temporarily leave the university is not in any way an act of defection[5].

Evaluation Research

The educational institution undergoes an evaluation system as part of management subjects and the processes involved. But in the educational process which cannot be evaluated should be investigated.

The educational system

The educational system is as assertive and relational *holon* as the action functional deployment of subjects, found that although the approach used to signify curricular practices, also redefine and improving their ability to return or cancellation of your hypothesis.

Learning goes beyond the training of individuals for the effective performance of the role. Action is justified in its own right as well as being a role and a function, learning, identity and experience in set construction. In the educational system, as expressed, the teacher and the student exchanged the role and function as dialogic me - I, subject and object of knowledge. While the school confers a job (paid), the teacher, this guarantees a longer time spent in the institution the student and makes it subject to responsibilities, rights and obligations different from the student. But that difference is not a disadvantage.

The curriculum at the university expresses the spirit that historically based. Is the proposal coordinates and directs institutional purposes and institutional actions. The curricular approach expresses tacit or ostensibly an educational project and utopian philosophical affiliation. It is an expression of institutional intentions, as the objective and means of expression are the curricula. Each approach has its own curriculum

[5] Defection. (From the lat. Defectĭo,-onis). 1. f. Action separated by unfairness or bias because they belonged to. [http://buscon.rae.es/draeI/SrvltConsulta?TIPO_BUS=3&LEMA=defección. JVGM consulted on February 15, 2007]

content and it is named as embodied and expressed in the plans and programs of study are eligible.

The explicit and formal teacher training has been a central concern of groups of teacher educators institutional. There have been many streams and lines that have developed proposals in this regard. It is important that teachers in schools organized meet discuss and propose the graduate profile, content and methodological approaches with which they work. The educational system and project articulates three basic processes of education: Teaching, learning and communication. See Figure 10.

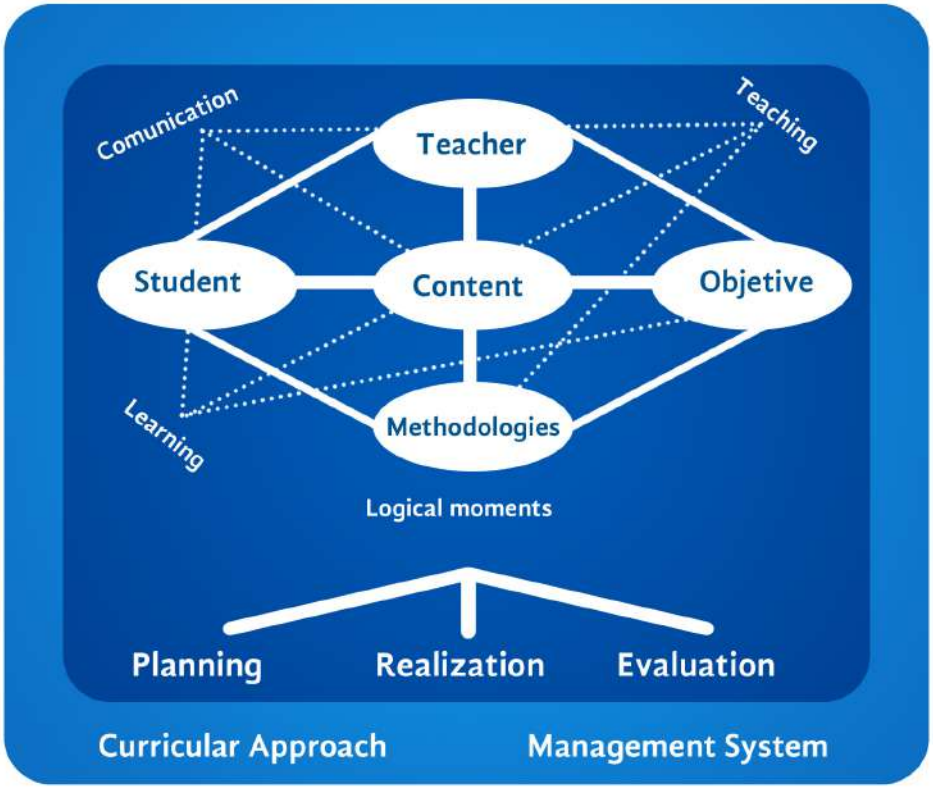

Figure 10. Shows the processes that articulate the educational system, the pivot point is the content..

These three processes overlap in three categories namely:

- The **man** as subject and as a knower institutional.
- The **knowledge objects** knowledge, practices and expressions that are the content and the *holoverso* coming.
- The **action** that is linked and as subject and object of knowledge.

Learning and teaching intentions and communication involving both the man and his circumstances, and the nature of the object of study, which will be promoted as well as the information on the nature of the action to be deployed for training.

This learning relationship informs and shapes the subject, according to the guidelines set out in the curriculum approach.

The training system consists of five organic elements and four logical moments (not sequenced in time):

Subjects with two roles (interchangeable) teacher and student, three functions (complementary) teach, learn and communicate, and two types of fixed positions in the ratio academic and student teaching.

- The student
- The teacher
- Content is the point of joint student-teacher.

The purpose or purposes that describe the level of content and how to address it in relation to curricular approach.

- The teaching methodologies that can be grouped into problematized content design, learning activities, materials and resources, and systematization interactions.

Learning

Domains or academic and professional skills are as substrate both the subject of knowledge (teachers and students) as the object of knowledge (already configured as curricular content). Ie. domains or competencies can be developed only in subjects and educational activities, in the logic of meaningful learning. Meaningful learning is due to the orientation of incorporating subject to disciplinary fields, fields of significance, considering the actual consciousness of the subjects and their possible transition to consciousness. See Figure 11

The purpose of teaching is to enable students to learn. The teacher makes five methodological works to make this learning possible, however these activities for the student teacher's basically unnoticed esprezzatura effect, which is the art of making the difficult look easy. It is the art of concealing any artifice. What is hidden in the deployment training. Finally in Figure 12 shows the main teaching methods and their implications.

Figure 11. shows the implications of meaningful learning for the deployment of complex thought.

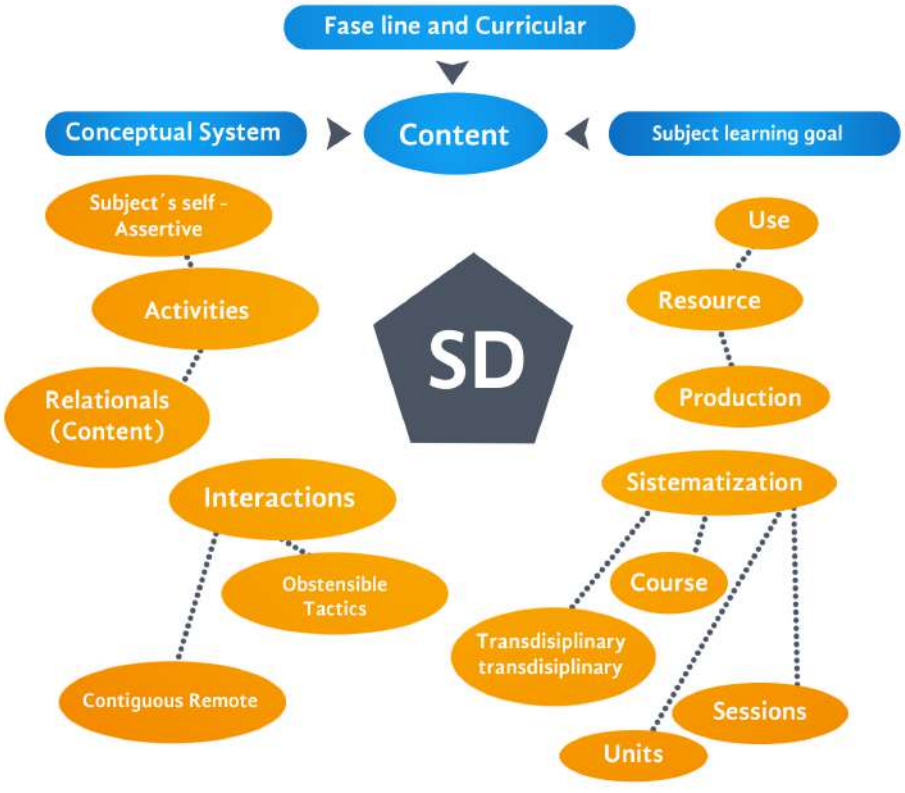

Figure 12. teaching methodologies

Conclusions

The *Holoversidad* as open systems model for university, the proposal is part of a contemporary pedagogical model construction and is based on the concept of pedagogy as the discipline of education, anthropogony with philosophical vocation, heuristics, speculative, purposeful, critical, rational and transforming seeking the common good of all and everyone in this life, that's optimistic but not naive, as cultural field has a correlation with the utopias as propulsion of his thought, his will to be and doing.

This participation demonstrates the urgency of transdisciplinarity (confluence of professions and professionals for troubleshooting lancinating) and forging the conviction of the urgency of its spread.

Model building can be the way to project utopias new meaning militancy and unfinished, but can also be a kind of tightrope walking, if it has enough tension and point of orientation, is in danger of falling into place that was fleeing.

Everything is connected to everything, but that cannot be explained, just for that propose models to open a debate on the most relevant core problems, in the belief that the most valuable of these models is that they are written and therefore can be discussed, copy, resume, challenge, ignore and share.

From an exclusively of Pedagogy is not possible to see the world, but no sense Pedagogy.

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