

**THE REORGANISATION
OF THE CURRICULUM IN
EDUCATIONAL CYCLES IN
CODEMA COLLEGE:
A POSITIVE STEP
AND PAINTINGS IN THEIR
STEPS FRACTALS**

THE REORGANISATION OF THE CURRICULUM IN EDUCATIONAL
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PREFACE

The art organizes everything by parts. The authors of this work are implacable authors of some dawns, evenings and nightfalls that bring a fresh change to the Homo Sapiens at any place of the planet. Their valleys, volcanoes, atmospheres, are not only theirs, they are of all of us. They are of the whole world. They will be of the future world. The future generations will enjoy their discoveries, of what today they copy from the nature that surrounds us. The landscape, suddenly becomes difficult to rescue but with the knowledge and dexterity characteristic of the authors of this beautiful book, one proves that, in all the five continents, new aesthetics and semiology transformations, are generated.

The reorganisation of the curriculum in educational Cycles in codema college: a positive step and paintings in their steps fractals and paintings in their steps fractals demands an imagination effort. The authors go developing dimensions with colors and give organic forms arranged to them while they paint. They recognize that the essence of life, increases, it transform and changes in the synergetic objects that they paint in the solid, liquid and gaseous states. They allow in their representations that those parts are logically adequate, so that there is harmony in their painting. The parts that they organize, require a structural setting that is adapted to the variations of functional requests and allows to give extension and relation to the organic structures that the

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DEDICATION

To family.

To my brothers, my sister, friends, grand-fathers (Roberto Arturo Vasquez Pereira, Victor Ceron Martinez Madrigal), grandmothers (Laura Escobar Henao, Francisca Rosa Vasquez Perez), great-great-grand-fathers, great-great-grandmothers, relatives, family, humanity, cosmos. To Dr. Fabio Vasquez Escobar To the Most Excellent Bishop Gerardo Martinez Madrigal. To the Most Excellent Bishop Guillermo Escobar Velez. To the Excellent Ambassador Raul Vasquez Velez. To the Excellent Ambassador Lucelly Garcia Tobon.

To Marco Tilio Duque's School, Conrado Gonzalez Institute, IDEM Fray Julio Tobon Betancur Colombian Polytechnic, National University, Autonomous Latin-American University, SEP, University of Antioch, Bolivian Pontifical University, UNAM, UAG, UNISARC, Sao Paulo University, Free University, Salvador Duque School, University EAFIT, University of Sydney, University of Helsinki, University of Tampere, University of Cape Town, TEC; University of Guadalajara, UCLA, MIT, University of Houston, Harvard University, Yale University, Oxford University, Linguaphone Institute, Cambridge University, Scranton University, UNESCO, DOMETAL, RIOTEX, COLTEPUNTO, Company of Packings S.A., Technological Institute. Pascual Bravo., Modern Institute of Education, ASSTI, ESAP Colombian Polytechnic Jaime Isaza Cadavid, Montessori School, SENA, University de San Buenaventura, International Center of Cambridge, The St. Lukas Academy, Bamberg University, Pekin Normal University, Who's Who in the World, American Biographical Institute, The Marquis Publications, Editorial Papiro, Colombian Polymers, VIAMACOL, Rotary International, Biographical

Institute of United States of America, Superior Academy of Technical Industrial Services, National Service of Learning, Reforestation Company La Floresta, Casa de Reyes, Engineering School of Antioch, The Southern African Comparative and History of Education Society, University of Paris, Hospital El Carmen de Viboral, Beijing Normal University, Tokyo University, Waseda University, University of Guadalajara.

To the schools, institutions and universities of the five continents that offered me the opportunity to recreate, relearn, reinvent, rethink and study.

And to the whole last, present and future humanity that consecrates the cultivation of the right values, the positive visions, and life, is a great company, the post modernity, the fractality, the harmony of the societies and universal cosmos.

GRATEFULNESS AND RECOGNITIONS

To the whole last and present humanity
and their universal cosmos.

Recognition also to the M. C. Tonatiuh Bravo Padilla, Rector General, U. de G.; Dr. Marco Antonio Cortés Guardado, Rector CUC, U. de G.; to Dr. Remberto Castro Castañeda, U. de G.; to Dr. Jorge Tellez Lopez, U. de G.; to Bachelor Raul Padilla Lopez, U. de G.; Dr. Raul E. Tamayo Gaviria, Professor Vagn Lundsgaard Hansen, Professor Ching-Lin Hu, Professor Byung-Jin Lee, Professor Erwin H. Epstein, Professor Shin'ichi Suzuki, Dr. David Turner, Dr. Medardo Tapia U., MRS. Guadalupe Gonzalez de Turner, M.C. Jesus Cabral, U. de G.; M.C. Maria Morfin, U. de G.; Dr. Maria Antonia Abundis, U. de G.; Bachelor Arturo Fernandez, U. de G.; Bachelor Javier Fernandez, U. de G.; M.C. Patricia Medina, U. de G.; Dr Alfredo Cesar Dachary, U. de G.; Dr Stella Arnaiz, U. de G.; to MRS. Barbara Bush, to Dr Fabio Vasquez E., to Dr Humberto Martinez V., to Dr Guillermo Esquivias L., for their observations and comments.

INTRODUCTORY COMMENT

Abstract

The policy of reorganising schools in pedagogical cycles has been restored little by little in the state schools of the city of Bogota. This reform began in the year 2008 in CODEMA COLLEGE, which faced a number of challenges, personal as much as institutional. The reform depended upon the participation and engagement of the educational community in the reform process, and for that reason, this paper presents a positive view of the school reorganisation in relation to the theme of cycles, to balance some of the views that have been expressed previously.

Keywords: reorganisation, curriculum, educational community.

Introduction

During the last two government administrations of the city of Bogota education has been made a priority, starting from 2004 to 2008 with the regional plan, “Bogota without indifference”. This plan focused on concrete actions for school communities that redressed some of the problems facing schools; feeding the school children; better physical conditions for students; and thus optimising school performance. Later the reform moved on to reorganise schools in pedagogical cycles, which was one of the projects under the banner of the sectoral plan, “Quality education for a positive Bogota” (2008-2012), which was proposed as a response to the need to promote a quality education in the Capital District.

The order of priorities of the Sectoral Plan 2008-2012 “Quality education for a positive Bogota”, is clear, namely to improve the quality of the education. To achieve this, certain actions are proposed that can turn the project into reality. These are to update of the training programmes and to transform the school organization and teaching methods. All this was to fulfil the purpose of having excellent schools and well educated young people with respect to the values and principles of society.

In this sense, the Programme of Quality and Relevance of Education, had, as a fundamental intention, to transform educational institutions pedagogically, to change pedagogical practices and conceptions, to implement the programme, Tools for the Life, and to reorganise the curricula in educational cycles in the 370 schools of Bogota. This implies that the processes of education should centre on learning, recognising the peculiarities and needs of adolescents young children during the different stages of development, providing the conditions that facilitate access to knowledge in a holistic way.

The development of the process of curricular reorganisation

To stimulate the development of the process of curricular reorganisation in cycles, together with the programme of Tools for Life, the Secretary of Education of Bogota designed a methodological and conceptual plan that consists of the following phases: I. Preparation; in which the proposal is discussed and awareness raised, and the conditions of time and space are created to initiate the support process, II. Formulation; in this phase all the processes in relation to the redesign of curricula in cycles are planned, III. Implementation; in this

phase the processes planned in the formulation phase are executed, and IV. Follow-up and sustainability; during this phase actions are designed and executed that guarantee the sustainability of the process or reorganising the curricula in educational cycles.

It is clear what was being attempted here; the Secretary of Education called on the educational community, and its response confirms the point made by Navarro: “The implementation of educational policy is a complex task. It generally demands that numerous educational actors participate; central and local directors, students, supervisors, bureaucrats and parents or, at the very least, that they do not actively oppose. It is very important to take into account specific data on local conditions that affect the operation of the system. Concretely, to decide whether decision made centrally applies in practice to a certain locality is a far-reaching task” (Navarrese, 2006).

At this point, it is possible to affirm that in CODEMA COLLEGE, which provides the case study for this paper, the development of this process of pedagogical and curricular construction could count upon the participation, the will, the autonomy and the educational commitment of the local directors of education, managers, and, in particular, teachers, students, and parents, which is to say of the whole educational community. The work developed in the school began with concrete, collective agreements, which allowed for ownership of the process, and the gradual introduction of true pedagogical transformations.

It is relevant to note that, although today the balance of the implementation of the policy of cycles in CODEMA COLLEGE is positive, in the beginning of the process there was

disagreement on the part of the teachers. They were the first group that was called upon to own the process, and there was great confusion produced by their fear that this involved reframing their pedagogical practice and their educational functions, as well as modifying the principles of school organization that had existed since time immemorial. But little by little, with the effective work on the part of working parties and the leadership of the process of adaptation, the attitude of the educational staff over the last three years has come together in such a way that today CODEMA COLLEGE is one of the most advanced institutions in the locality in terms of the development of cycles.

Process of collective consultation

To develop the processes of collective consultation during the promotion of this reform, it was necessary to create and to reinforce local and institutional spaces, such as meetings with the team of cycles, where the attending teachers were persuaded of the relevance of their participation in the creation of a school environment that was relevant to their specific context, and which is the centre of many dynamic social relationships. While the curricula were being redesigned in cycles, higher education institutions and other educational institutions were contracted as consultants to support the schools on site. This had the purpose of tying the academy in to this process of transformation. The whole process took place under the leadership of the office of the Undersecretary for Quality and Relevance in the Secretariat of Education of Bogota. The Local Quality Team, the University de la Salle

and the Academic Councils were all involved in the school, as well.

There were constant meetings between those who worked in the school and the academic advisors and consultants, where those who attended took part in the network engaged in reforming the curricula into cycles, and there was an interchange of ideas about local implementation. This resulted in the benefit that the teachers absorbed this new idea and took part in the process of construction in the school.

From the point of view of education of quality, the project of curricular reorganisation in educational cycles in CODEMA COLLEGE took for granted, as a pedagogical principle, that considering the centred human development, and recognising the participants as integral human beings, with capacities, abilities and mastery that must be developed, for the development of individual and social, guarantees the quality of the educational outcome. This makes it relevant, principal adviser of the school organization, trying to give responses to the daily questions, including, What to teach? How to teach? and How to evaluate? This was an open attempt to take into account the coherence of the socio-cultural context and the characteristics of the children and young people, in their different stages of development.

The reorganising of curricula in educational cycles

The reorganising of curricula in educational cycles is a different way to think, feel and operate the school. It organises the processes of education and learning from the perspective of valuing the boys, girls and young people, while offering the possibility of learning through pedagogical strategies that respond to their interests and needs and the demands of growth

in the educational context (Ramirez, 2011).

This educational policy has made real and positive contributions to improving the conditions of life of the population, making education a democratic, participatory exercise of social development for each and every citizen. Consequently, the organization of education in cycles is a strategy to make a school more relevant to daily life, and has turned CODEMA COLLEGE into a space of constant investigation and research, that has taken the reconstruction of the curriculum as an area of research and participation, where the teachers and students become researchers and the object of research.

From this perspective, it is worth considering the work of Gajardo (2003) and his classification of the factors that have contributed to reducing school drop-out, and how CODEMA COLLEGE demonstrates a good balance in the work that is being carried out:

- a) The increase in the pre-school enrolments, which has improved the success of children in the first years of primary and has reduced repetition, one of the factors that affects early drop-out from school most;
- b) The change to systems of automatic promotion during primary education, or at least the early years, which has reduced the number of over-age pupils, a factor strongly associated with school drop-out;
- c) The introduction, extension and, in some cases, better focusing of programmes and subsidies designed to improve school retention (scholarships, free school materials, programmes of school meals, and others);
- d) The improvement of the school infrastructure and the availability of quotas;
- e) The greater involvement of parents and the introduction

of incentives to participate in activities of the school and following the school progress of their children, and of their results. This has led parents, and the students themselves, to place a higher value on education as the single or main source of capital capable of improving their chances of access to urban employment (Gajardo, 2003).

Up to now, we looked favourably on the reorganisation of the school into cycles. Now we will go into the meaning of that reform in more depth so that it can be understood better. The Secretary of Education District (SED) adopted a programme that organises the school into five educational cycles, involving the redesign of the Institutional Study Plan (PEI) in their pedagogical and curricular organization, as well as its school organization and administration.

In CODEMA COLLEGE a cycle is understood to be, “the set of conditions and programmes, of intentions and strategies, of pedagogical and administrative resources, integrated and articulated with each other, so as to develop a time unit that includes several levels of difficulty, and within which the students can advance with more flexibility until reaching the objectives of the programme at the end of each cycle, which are linked to the aims of the education embodied in the General Law of Education”, (Ministry of National Education, 2006). Since 2008 this public policy has been implemented, and has demanded continual reflection on the state of educational practices, their characteristics, advances, difficulties and perspectives.

In line with this thinking, the main actions that have been undertaken in the institution are: the study of the sectoral plan for education, and specifically the pedagogical reorganisation in cycles; the implementation of phases 1, 2, 3, and 4 of the reorganisation in cycles; the evaluation of the students in relation to cycles; and, the adoption of specific projects for each cycle defining the character of the cycle (characteristics of the boys, girls and young people, and of the teachers). These actions guide the progression of the processes to develop the students in

each cycle.

Pedagogical strategies have also been adopted to fit the cycles. Curricular guidelines orient the pedagogical process in the cycles. Socialisation into the educational community is integral to the cycles. The Institutional System of Evaluation (SIE) was adopted, following the guidelines of the Institutional Study Plan (PEI) for the reorganisation in cycles. Academic duties have been reorganised in line with the cycles, and the processes of academic and administrative support have been realigned with the cycles (Coordination by cycles).

There have also been adjustments to the school timetable, according to the introduction of cycles, involving the creation of official times for teachers' meetings, again organised by cycles, as well as the creation of local and institutional in-service training days, qualification and update of teachers through local meetings, courses, seminars, pedagogical days, and cycle meetings.

The implementation of pedagogical activities has reinforced the cycles, for example in terms of the pedagogical outcomes, team work and inter- and cross- disciplinary projects. Curricular design is discussed in relation to cycles. The design of school and family support processes and improvement functions according to the dynamic that the reorganisation in cycles demands. The didactic discussion on trends, models and approaches is geared to the pedagogical reorganisation in cycles. The discussion on the organization of the education processes and learning by cycles has lead to a rethink of the educational concepts on the part of the teachers, and also the students. This means that school dynamics revolve around the category of cycles in the institution.

In the processes discussed here, the school has depended on the continual support of the SED at a central and local level, with support of teachers and educational managers, and the coming together of the various organs of school government, including the Senior Management Team, Academic Council, Parents Association, as well as the Student Council. The process has also had the regular recommendations of the Commissions on Evaluation and Promotion.

Conclusions

The institutional effort has led to the reframing of many of the practices that, over the years, have constituted the daily routine of the school, and an educational ideal is being constructed that transforms education in the school, makes it possible to offer a high quality education that is relevant to the demands of the times and of the community, a human education where it is clear the boy, girl or young person is the centre and subject, which reminds us that, “Before too much importance was attached to what was taught; today we need to discover what type of professionals and citizens a society needs” (Rivero, 2000). The result is a school where the pedagogical relationships that have governed the school throughout time are altered.

Finally, it is possible to affirm that the curricular reorganisation in pedagogical cycles plays a central role in the generation of reforms that can be implemented in practice to promote the autonomy of schools and educational decentralisation. The transfer of pedagogical and curricular decisions moves them from central government to the school (García - Huidobro, 1999). From this perspective, the centre is put into the education process – learning, and the ways in which it can be optimised, through close collaboration with the agents who participate in this process (Guzmán, 2004). This school finds itself facing a true transformation, where attendance, contribution, participation and commitment are expected, to meet the standards of the educational community which is CODEMA COLLEGE.

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Note: To page 28 to 72, the reader is left between the mentioned interpretation and paints for the reader to generate their own ideas and creative about. This is an exercise in creative writing and painting to generate new ideas.

OBSERVATION:

Rhocrematic process in electromagnetism pedagogy.

Discrete Variable

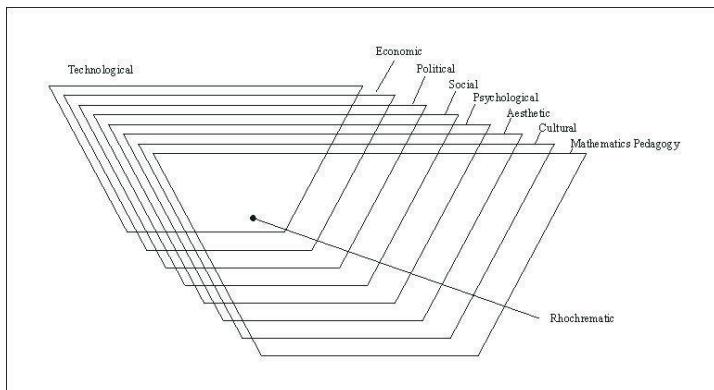
$$\sum_{b1}^{a1} x_1 + \sum_{b2}^{a2} x_2 + \dots + \sum_{bn}^{an} x_n + \dots + \sum_{bk}^{ak} x_k$$

Continuous Variable

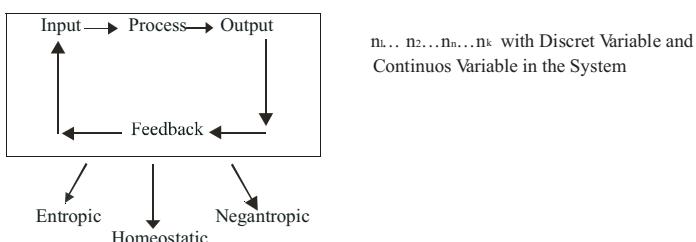
$$\int_{b1}^{a1} x_1 + \int_{b2}^{a2} x_2 + \dots + \int_{bn}^{an} x_n + \dots + \int_{bk}^{ak} x_k$$

Integrating the Rhocrematic process in electromagnetism pedagogy.

Integration System



Rhocrematic → The Process of Reprocess
Process System



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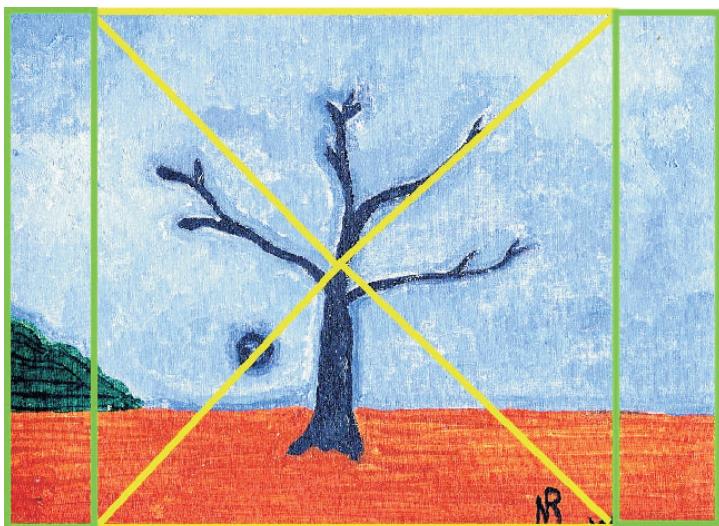
The reorganisation of the curriculum in educational cycles in codema college: a positive step and paintings in their steps fractals



1 cuadrado
5 triángulos escalenos
1 romboide
2 rectángulos

Phase 1

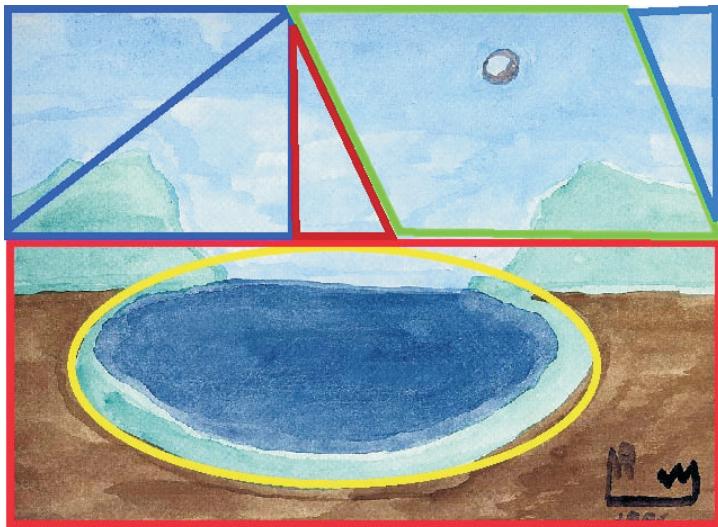
The reorganisation of the curriculum in educational cycles in codema college: a positive step and paintings in their steps fractals



2 rectangulos
4 triangulos isosceles

Phase 2

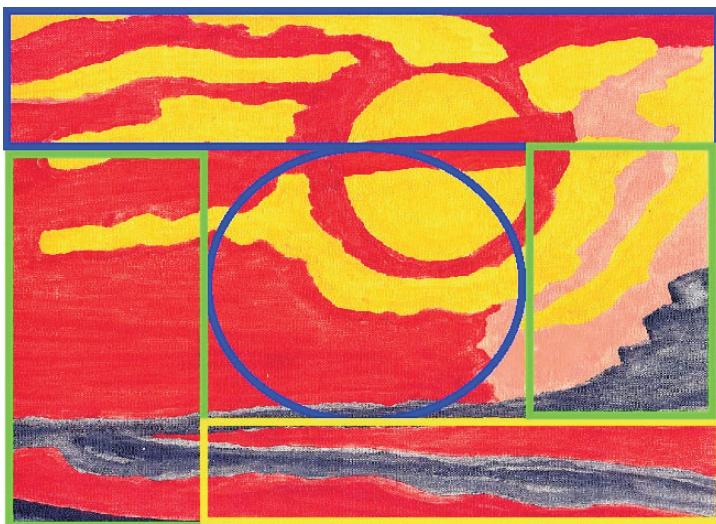
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1 rectangulo
1 circulo
4 triangulos escalenos
1 romboide

Phase 3

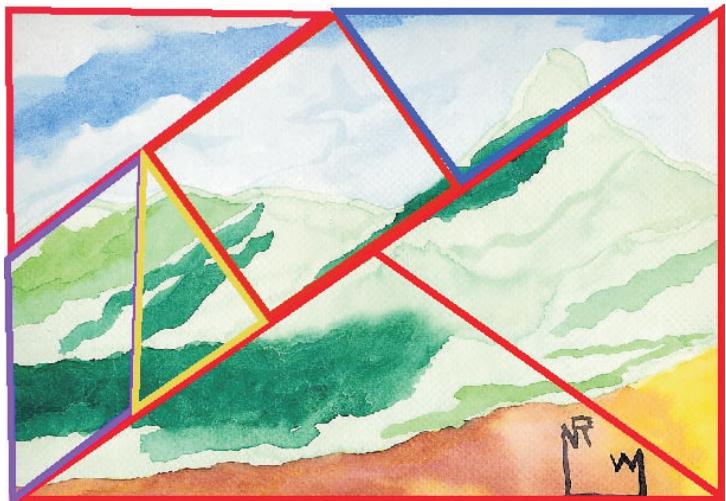
The reorganisation of the curriculum in educational cycles in codema college: a positive step and paintings in their steps fractals



4 rectangulos
1 circulo
4 triangulos esosceles

Phase 4

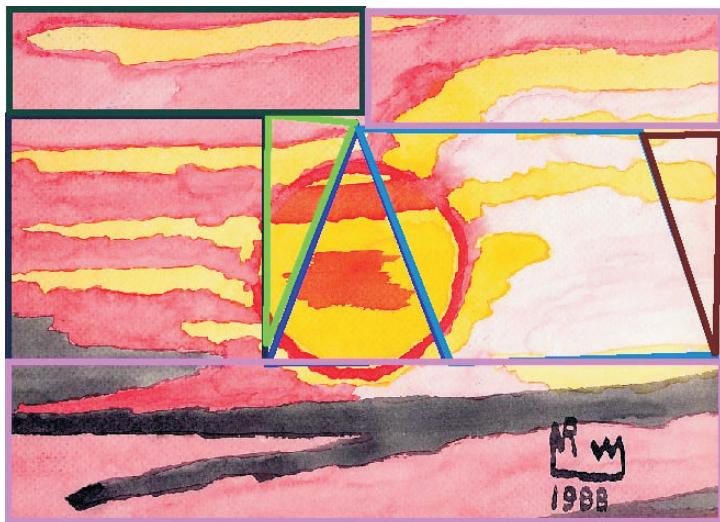
The reorganisation of the curriculum in educational cycles in codema college: a positive step and paintings in their steps fractals



1 triangulo equilatero
4 triangulos isosceles
1 romboide
1 cuadrado

Phase 5

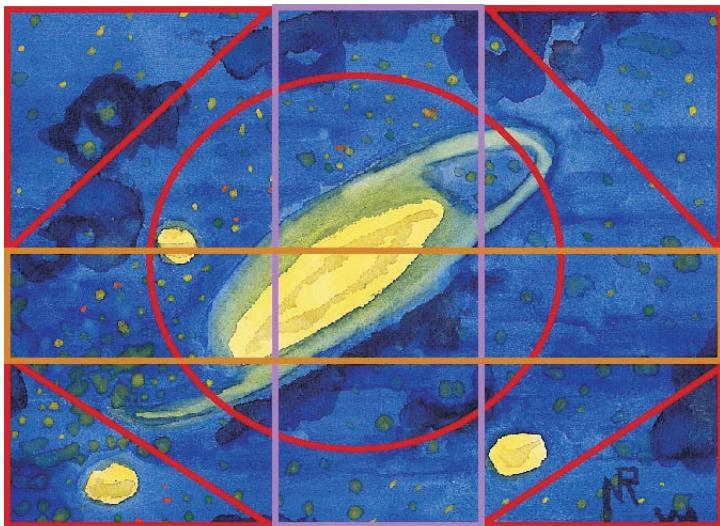
The reorganisation of the curriculum in educational cycles in codema college: a positive step and paintings in their steps fractals



3 rectángulos
1 cuadrado
1 romboide
1 triángulos isosceles
2 triángulos escalenos

Phase 6

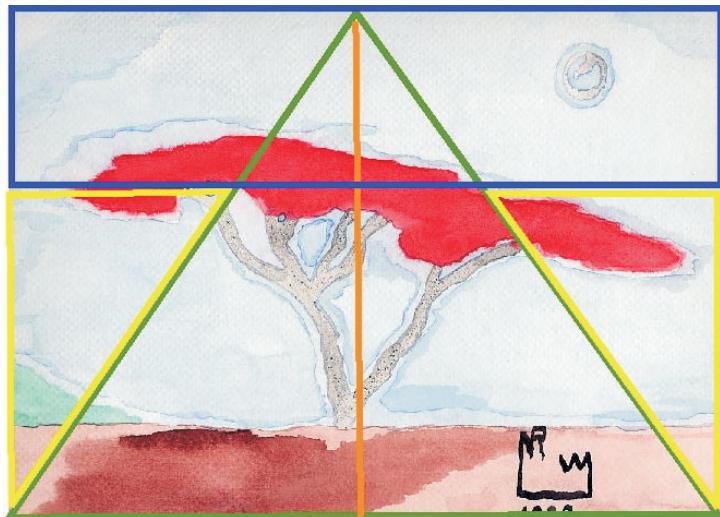
The reorganisation of the curriculum in educational cycles in codema college: a positive step and paintings in their steps fractals



1 círculo
8 triángulos isósceles
2 rectángulos

Phase 7

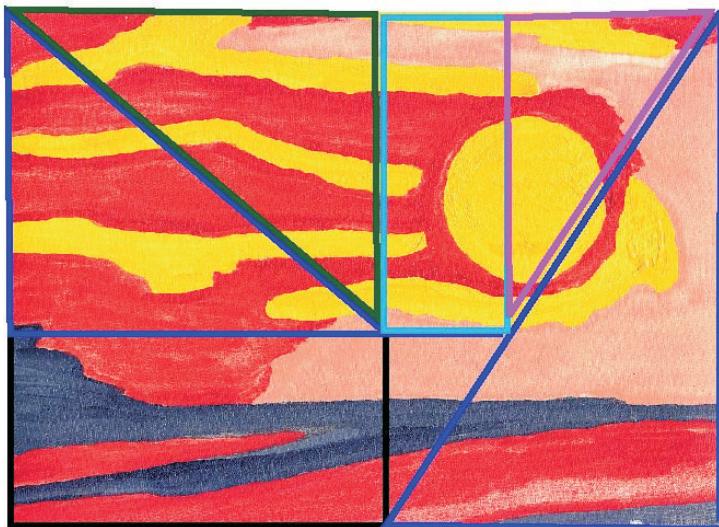
The reorganisation of the curriculum in educational cycles in codema college: a positive step and paintings in their steps fractals



1 rectangulo
1 triangulo equilatero
6 triangulos isosceles

Phase 8

The reorganisation of the curriculum in educational cycles in codema college: a positive step and paintings in their steps fractals



2 rectangulos
5 triangulos escalenos

Phase 9

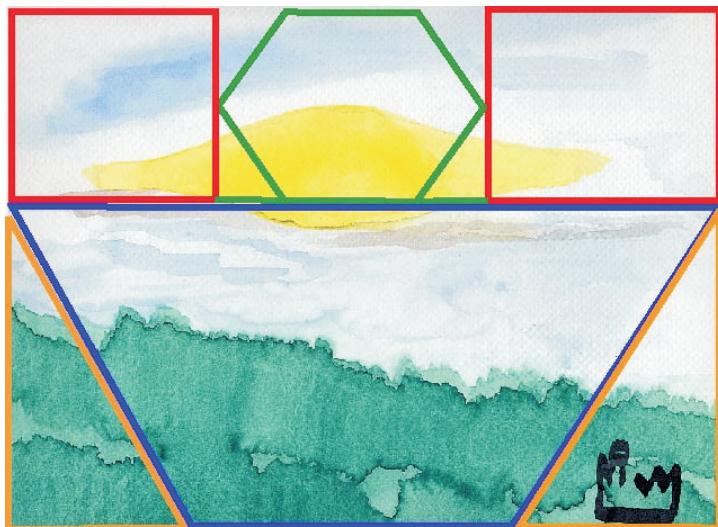
The reorganisation of the curriculum in educational cycles in codema college: a positive step and paintings in their steps fractals



- 1 cuadrado
- 5 triangulos escalenos
- 1 romboide
- 2 rectangulos

Phase 10

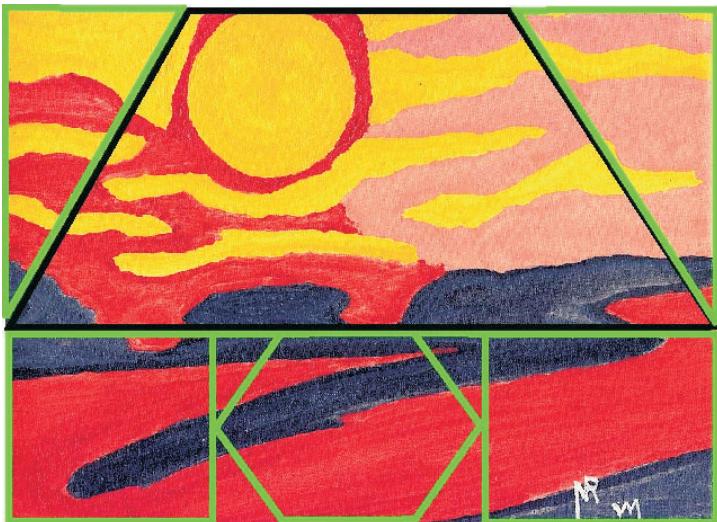
The reorganisation of the curriculum in educational cycles in codema college: a positive step and paintings in their steps fractals



6 triangulos escalenos
1 trapesio
2 cuadrados
1 hexagono

Phase 11

The reorganisation of the curriculum in educational cycles in codema college: a positive step and paintings in their steps fractals



6 triángulos escalenos

1 trapezio

2 cuadrados

1 hexágono

Phase 12

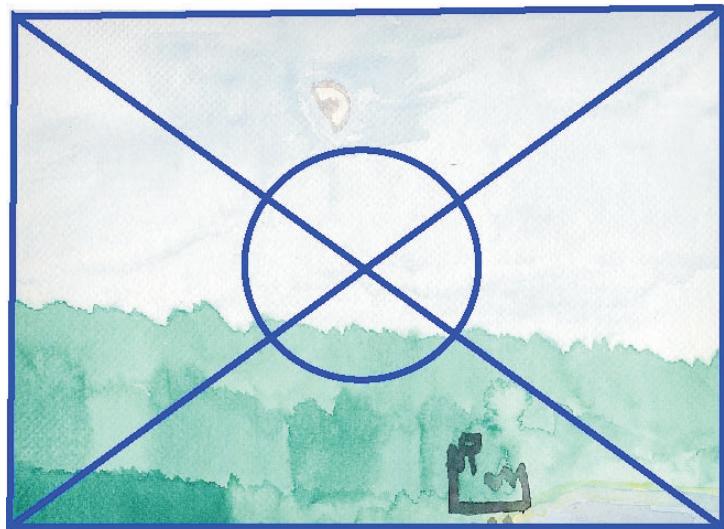
The reorganisation of the curriculum in educational cycles in codema college: a positive step and paintings in their steps fractals



4 triangulos escalenos
1 circulo

Phase 13

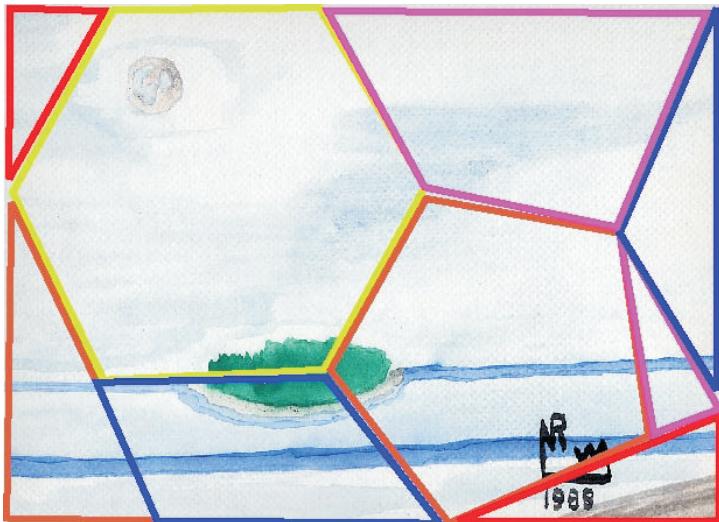
The reorganisation of the curriculum in educational cycles in codema college: a positive step and paintings in their steps fractals



2 triángulos equiláteros
2 triángulos isósceles
1 círculo

Phase 14

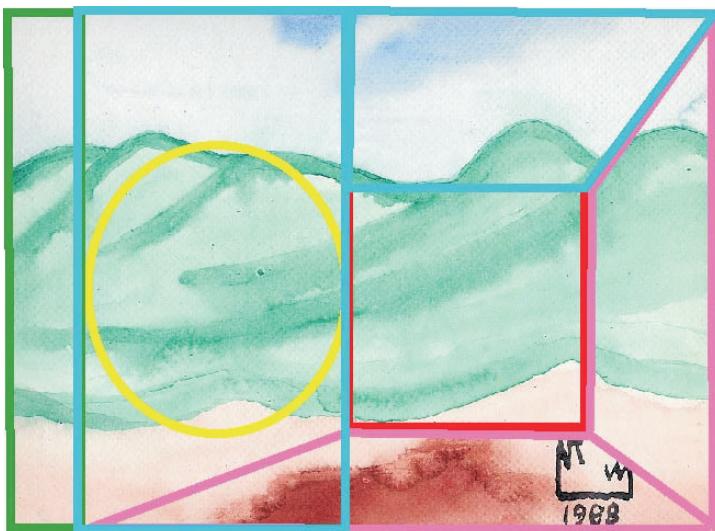
The reorganisation of the curriculum in educational cycles in codema college: a positive step and paintings in their steps fractals



5 triangulos escalenos
1 hexagono
1 pentagono
1 romboide
1 trapezio isosceles

Phase 15

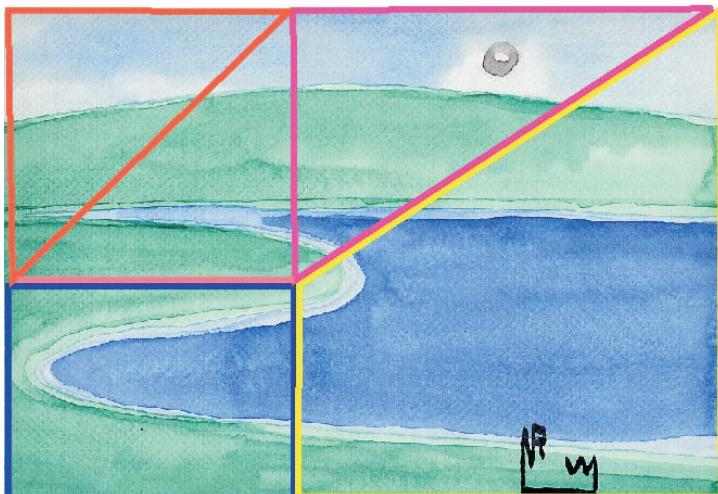
The reorganisation of the curriculum in educational cycles in codema college: a positive step and paintings in their steps fractals



- 1 CIRCULO
- 1 CUADRADO
- 1 RECTANGULO
- 1 TRAPESOIDE
- 1 TRIANGULO ISOSCELES
- 2 TRAPESIOS ISOSCELES

Phase 16

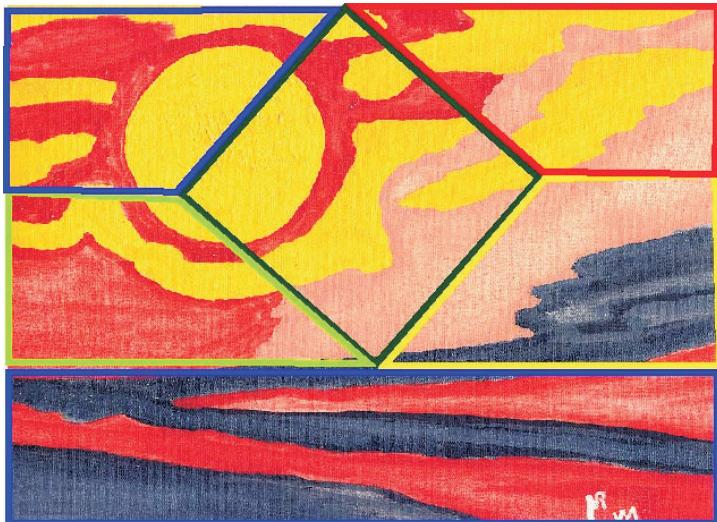
The reorganisation of the curriculum in educational cycles in codema college: a positive step and paintings in their steps fractals



- 1 cuadrado
- 2 triangulos escalenos
- 1 triangulo equilatero
- 1 trapezio rectangular

Phase 17

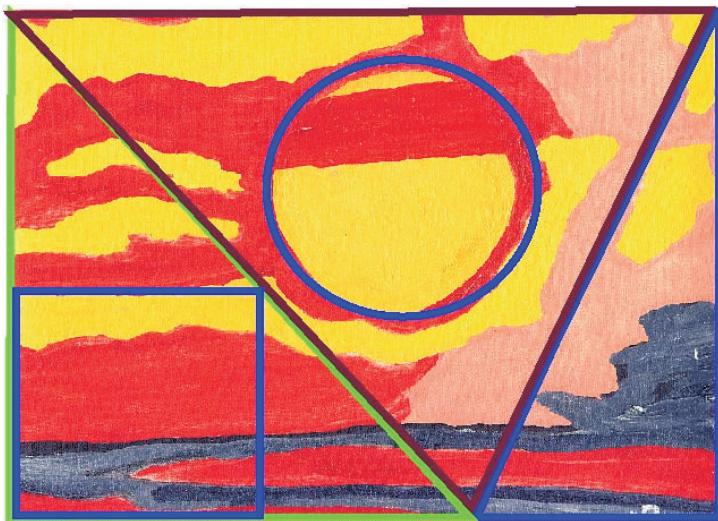
The reorganisation of the curriculum in educational cycles in codema college: a positive step and paintings in their steps fractals



1 rectangulo
1 rombo
4 trapezio recatangulos

Phase 18

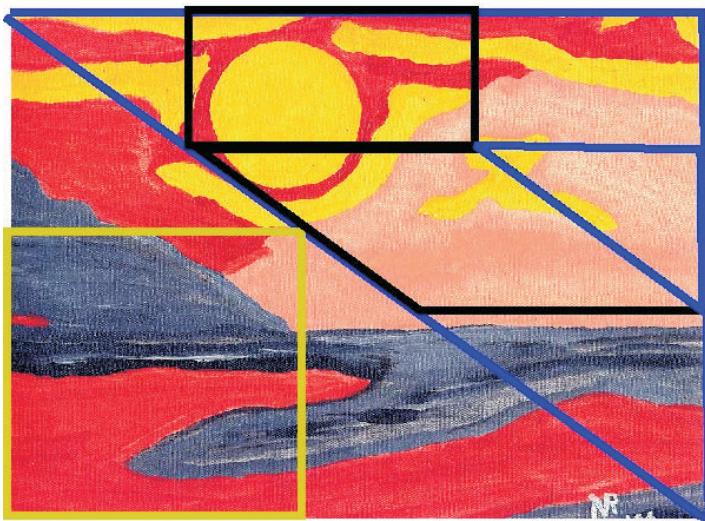
The reorganisation of the curriculum in educational cycles in codema college: a positive step and paintings in their steps fractals



1 triangulo isosceles
1 circulo
1 cuadrado
3 triangulos escalenos

Phase 19

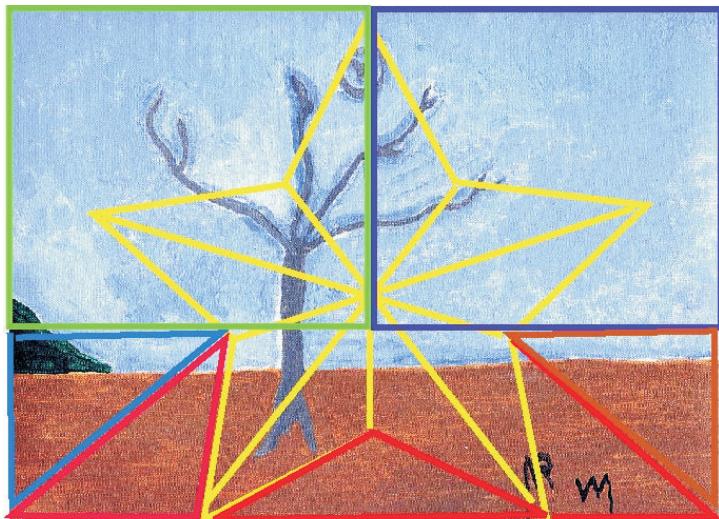
The reorganisation of the curriculum in educational cycles in codema college: a positive step and paintings in their steps fractals



1 cuadrado
5 triangulos escalenos
1 romboide
2 rectangulos

Phase 20

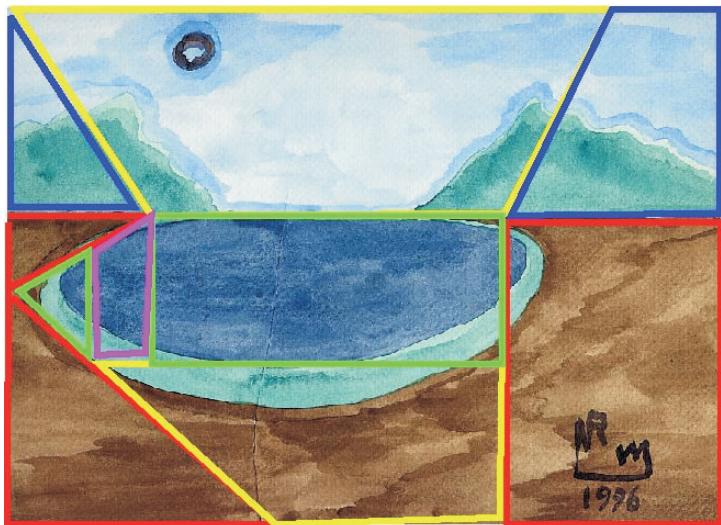
The reorganisation of the curriculum in educational cycles in codema college: a positive step and paintings in their steps fractals



1 estrella
2 cuadrados
5 triángulos escalenos
5 rombos

Phase 21

The reorganisation of the curriculum in educational cycles in codema college: a positive step and paintings in their steps fractals

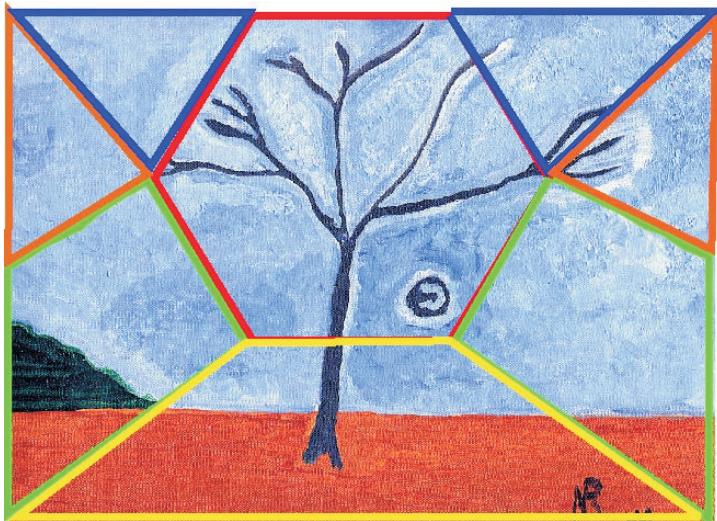


2 triangulos escalenos
1 triangulo isosceles
1 triangulo equilatero
2 trapezio rectangular
2 rectangulo

1 trapezio
1 trapezio isosceles

Phase 22

The reorganisation of the curriculum in educational cycles in codema college: a positive step and paintings in their steps fractals



4 triangulos isosceles
1 hexagono
2 trapezio isosceles
1 trapezio

Phase 23

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