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AN INTRODUCTION TO EPHEMERAL ART IN SCHOOL EDUCATION

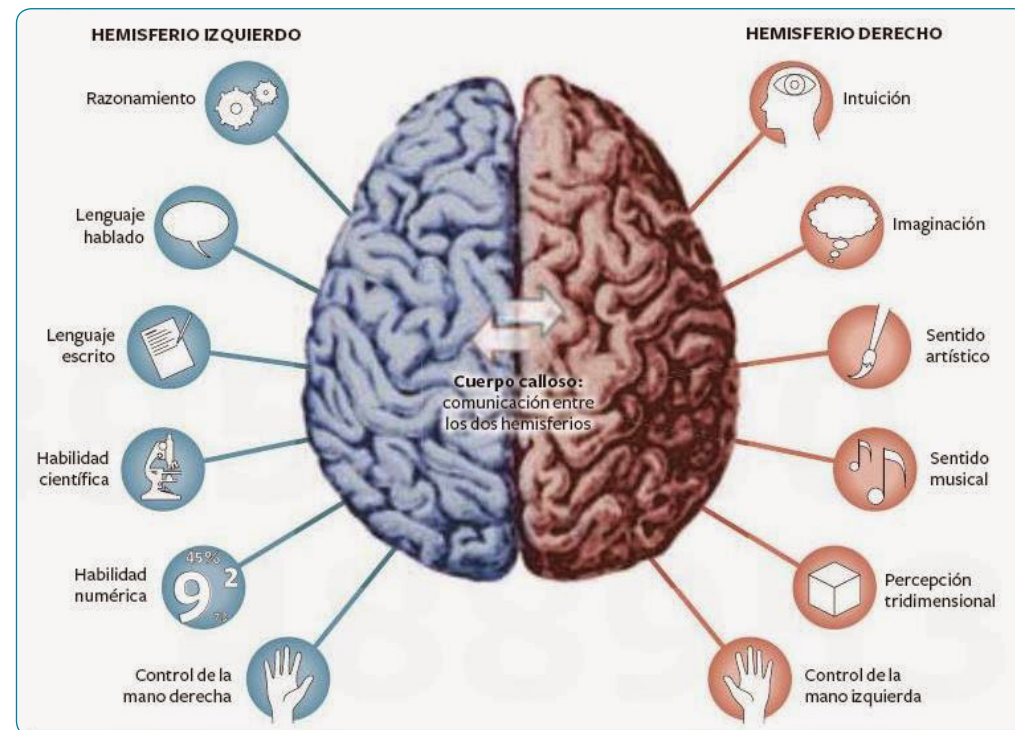
The importance of holistic education and skills development

The use of the left hemisphere of the brain, which is related to reason, analysis and the verbal part, has been mostly promoted in the more traditional teaching methods in which the teachers teach principally logical thinking and reasoning, operations and memorization. In contrast, the right hemisphere, that is identified with creativity, intuition and emotional behavior, has been traditionally relegated to the background, and its development has been less encouraged, since subjects such as art or music have been considered less important.

Currently, both hemispheres are educated in parallel until the age of 8 or 9 years old, but from then on, it seems that the creative response in our education begins to be penalized and the memorization is rewarded in a mechanical way, with hardly any room for critical thinking. Actually, when we look around we can see without any doubt that every element in our civilized society has been developed to a great extent with the intervention of that side of our brain that manages creativity, emotions and critical thinking. This shows the importance of this other type of thinking and how it is infravaluated in our educational system.

A very interesting exercise proposed in the book to explain the problem between the two hemispheres is to invite the students to describe a spiral staircase. The majority reaction of the students, in their attempt to explain a spiral staircase in words, is to raise one arm and describe a spiral in the air. And that is the most reasonable explanation of a spiral staircase, but the right side does not speak, so it has to force itself through the three-dimensional gesture in the empty space in an

attempt to make it clear to its left partner that this task is his, and that he had better take care of the resolution of other problems for which he is specialized. This is because the left hemisphere has the great advantage of being able to explain itself through verbal language, while the right hemisphere, considered in the 19th century the “dumb brother”, manages information that cannot be defended in this sense. So it tries to explain how a spiral staircase is in its own way. Because of the education we can see how the left hemisphere tries to dominate all areas of thought and does not allow the other to execute its specific qualities.



A curious fact is that we were taught that “you only know what you know how to explain”, however, when we understand the specialization of both hemispheres and that the right side has capacities of the same importance as the left side, several types of knowledge are equally important: declarative knowledge (knowing how to explain), procedural knowledge (knowing how to do) and attitudinal knowledge (knowing how to be). Both hemispheres are present to a greater or lesser extent in all types of knowledge. When both hemispheres develop together, cognitive skills and learning reach optimal levels. Therefore, the challenge is to have a brain with well-balanced hemispheres, as suggested by numerous studies at the Massachusetts Institute of Technology (MIT). There is even research that considers that the brilliance of minds like Albert Einstein’s has its origin in an excellent connection between the two hemispheres of the brain. Therefore, it is recommended that children encourage both sides from an early age.

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WHAT IS EPHEMERAL ART ?

Ephemeral art is an esthetic expression of temporary duration. The concept ephemeral comes from the Greek ἐφήμερος (ephēmeros), meaning “of one day”. One of the objectives of this type of artwork lies in the realization of the transience of life and mortality.

The transience, which is used as an artistic object, expresses the emotions that arise naturally when we see or feel something beautiful or esthetically pleasing, disappearing forever, and leaving only a memory. This characteristic means that the proposed activities are exempt from the concern of thinking about the future of the work and its journey through time, or the quality of its future aging, dealing only with the exact moment of creation of the work and the feelings that invade us to capture in that short space of time of exposure. The conflict between objective reality and the memory of something that no longer exists is what determines whether an art is ephemeral or not.

The 5 senses and the ephemeral art.

When we think of ephemeral art, it is common to do so in relation to the plastic arts rather than to other arts, but there are infinite possibilities depending on the classification. In fact, according to David Russell “Music is the most ephemeral form of art, because it only exists in time” (David Russell, Musician).

“Music is the most ephemeral form of art, because it only exists in time”

Hearing:

The music and the art ephemeral

For thousands of years, humans have composed, performed and enjoyed music as much as painting, sculpture, architecture, etc., but had no way of recording it. Thanks to writing, history began, and with it, the possibility of sharing experiences by throwing them into the future on clay tablets or hieroglyphs carved on the walls of tombs. On these walls we can also

observe sculpted musical instruments and people performing the necessary technique to produce, with them, ordered sounds that could be shared in multitudinous events such as feasts and celebrations, but always through the presential fact and the fleetingness of the event. It was therefore an inevitably ephemeral art. There was no possibility of capturing for posterity any art linked to the sense of hearing, which is why we do not know much about the music composed



in Pharaonic Egypt, classical Greece or many other ancient cultures. With the invention in the 19th century of the method of recording sound and, later, images this aspect of the music changed. It is true that there has been a system of musical notation in the West since the 10th century, with which a composition can be written down and



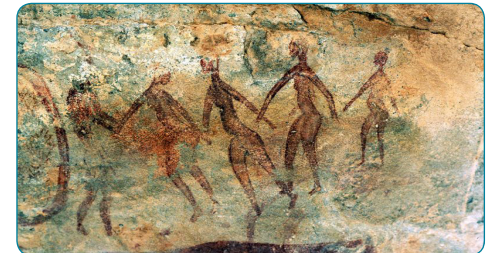
then performed by others, but that is not Music, it is only instructions. We can say that the sonorous “photography” of a musical work has not been possible until a little more than a century ago.

Among the characteristics of music is rhythmicity, whose origin comes from

the oldest sound pattern inherent to animal life, which is the “beat” of the heart. Its predictability means that we



can dance without any doubt as to when, for example, the loud beats of a song will be repeated, allowing us to improvise and interact creatively with the music. Dance may then accompany Music as the most ancient ephemeral art.



The taste and the art ephemeral:

Chocolate and sugar sculptures as raw materials

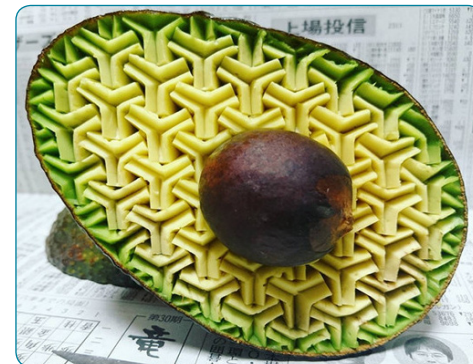
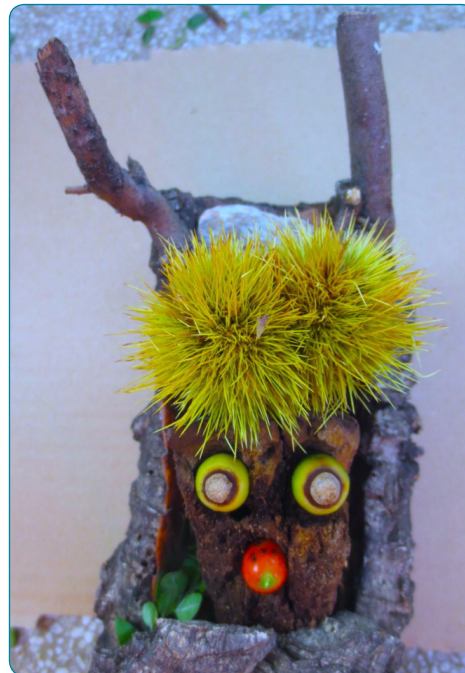
The handling of sugar as a sculptural material is similar to the way sculptures or blown glass utensils are made. However, because it is sugar instead of glass, the product becomes ephemeral, as the life of the work ends early when it is ingested. This, in a sense, does not mean the total destruction of the work, but rather that it is assimilated within us, becoming food and fuel for new artistic creations. It also involves an interrelation with gastronomic art and allows us to enjoy the immediate reward of sweets (we are creatures designed to highly value foods with a high energy value and sugar content).



The sight and the ephemeral art:

Ephemeral sculpture

This term encompasses a multitude of variants of ephemeral art, but they can all be classified into two groups. One is art that uses and extols the properties and qualities of the elements with which it works, and which owes its existence to the very essence of that raw material. This group includes those



mentioned later in this guide , such as land art, ice sculptures, sand art, edible artistic pastry sculptures, fruit and vegetable carving, and an endless number of unclassifiable varieties depending on the creativity of each artist and the materials at their disposal.



with, such as marble, diorite, granite, wood, iron, bronze and a long list of others. This ephemeral art is usually used in short-lived commercial events such as fairs, temporary exhibitions, props for films or plays. And it is very successful because of the ease and versatility of the most common synthetic materials, which are expanded polystyrene and this family of petroleum-derived compounds.



On the other hand, there is the ephemeral sculpture that uses raw synthetic materials, industrially processed, to carve them in an artistic way in order to obtain a scenographic representation. In other words, an imitation, generally, of another material that is heavier, more expensive and more difficult to work

Our universe as a species is essentially visual, unlike that of most higher mammals. That is why the bulk of “human” ephemeral art is for perception through the sense of sight. (We say “if I don’t see it, I don’t believe it”).

Land Art

Land art consists of making sculptures in sand or snow. They are often designed to be observed fleetingly from the sky or from great distances, making them ephemeral.

The complex climatic systems that generate strong winds or the natural tides, makes any artistic expression, in the middle of nature, ephemeral. Artists have used this knowledge to give a philosophical meaning to his work and to learn the need for detachment.



Ice sculpture

Ice sculpture: its ephemeral nature depends on the low temperature during the creation of the work, which begins to disappear as soon as it is placed in climatic values where humans can live and function normally. So it is in our climatic comfort zone that work cannot exist for long periods of time.



Mandala

(circle in Sanskrit). Man has used the concept of transience in ancient cultures, where it has been linked to religion and/or spirituality, as a parable of life itself, which is finite. We are the only species in which each individual knows that one day his or her own existence will end and through the philosophical/poetic aspects derived

from this fact, has created techniques such as the Mandala, used by various independent and non-communicating cultures. It is therefore an inevitable product of the recurrent thought of the human being about his mortality. This artistic expression of the ephemeral of our existence, attempts, on the other hand, to order chaos momentarily, making use of geometry and its



predictable nature, sometimes encapsulating figurative drawings inscribed in linear or polygonal elements. Then, once finished, after so much effort, affection and dedication, the authors themselves destroy it. They do it in a beautiful and respectful, ceremonial way, creating another ephemeral beauty out of the grey ashes that were colours, disfiguring the mandala in a cyclical and radial way, like a flower, until total destruction. This teaches us the importance of humility of personal effort and not reward for the ego. The goal is to be prepared to take on any loss. Detachment.

Ephemeral painting. The mural.

Graffiti, graffiti or graffiti (the first two, from the Italian graffiti, graffiti, and this in turn, from the Latin scariphare, “to strike with the scariphus” (stylus or awl, with which the ancients wrote on boards) is the name given to a form of free painting, notable for its illegality, generally carried out in urban spaces. Its origin goes back to the inscriptions left on walls from the time of the Roman Empire, especially those of a satirical or critical nature. These inscriptions from the archaeological period are more frequently referred to by the word “graphite”.

Pictorial art also has its ephemeral version. Mural painting. Either through the graffiti technique or in older representations such as in classical Rome, where conventional tools such as brushes made of animal hair were used. 9 Graffiti has as a distinguishing feature the use of textual content in

an original pictorial form, to vindicate some social fact that does not have the official attention that it is considered that it should by the common people. (In fact in the USA graffiti artists call themselves “Writers”, which means writers in English). Due to its clandestineness and the use of urban architectural spaces without



permission, the main technique used is the aerosol, because of its speed of execution, its ease of transport and the possibility of operating on surfaces

unsuitable for paint applied by brush or roller. This is due to the ability of the aerosol to penetrate holes and imperfections in the wall, to fix itself on glass, metal, embossed surfaces, etc. On the other hand, there is mural painting, which gives priority to the artistic over the vindictive. This variant is also ephemeral, as it is applied in

recent times, artists have appeared who combine both of these characteristics, and whose work is on a par with what we can see in a museum or exhibition hall.



open-air places where the weather and the climate deteriorate any element. They are also too expensive to be kept in perfect condition or restored. In

We can see that Banksy also uses another characteristic resource of spray painting, which is the possibility of using stencils to create more figurative drawings almost instantaneously. This is due to the illegality of many of the works, as they are found in places that are not permitted for this purpose, and the need to create the work undetected in the shortest possible time.

Below are a series of photographs in “Making of” mode that detail and form part of the creative process of the design and execution of a work of these characteristics.

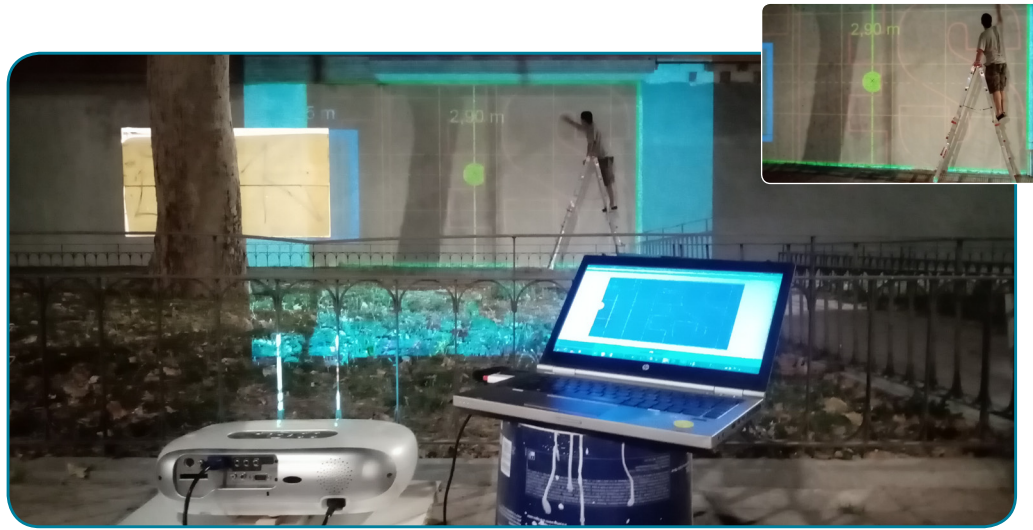
It all begins with the visual recognition of the wall to be painted. The taking of measurements on the ground and their subsequent execution with a computer programme designed for this purpose. Then the most elementary design is created. In this case, a hybrid formula was chosen, using a text as if it were a pictorial graphic but containing a written message. In order to choose and create this work, we began by gathering information about the activity of the

premises (in this case, an academic training center for people at risk of social exclusion) and looking for philosophical or social reasons that would help the local residents and, above all, the students who attend the center to learn, to identify with the work. This being the case, a famous phrase appears in the academic world of

physics. Isaac Newton wrote it in reply to another scientist (Hook) with whom he was corresponding. Hook congratulated him on his achievement of having understood “all by himself” the workings of gravity, and Newton replied “all by myself? I never was. And if I have got further than anyone else it is because I have always been ON

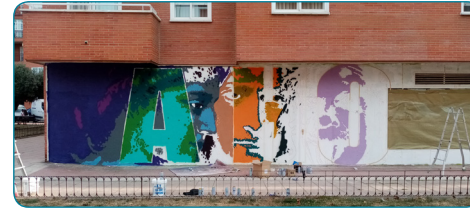
THE LEAVES OF GIANTS”. Newton was referring to a remarkable feature of our civilisation, which is that each new generation begins its academic, learning and research journey from where its predecessors left off. This is what Newton famously said. And being a training center, it is appropriate and allegorical. In the most pictorial sense,





the faces of seven women and seven men whose advances and contributions to humanity make them GIANTS were inscribed within the letters that make up the phrase. Once the design process is completed and the idea is approved by the work team involved in achieving the objective, the drawing is linearly marked on the wall. This is done, in this case, by using a video projector that uses light to capture the images on the wall. This task is carried out at night to ensure the visibility of what is projected and by means of several slides, as the proportions of the

wall are 50 m x 3.5 m, and it is impossible to project the whole graphic in a single image. All this pre-production work is essential so that once we get to the actual act of painting, everything is resolved and the composition is fitted according to its original design. The long awaited painting process begins. With the reference in the mobile phone.



Day after day the drawing is filled in from left to right, in an orderly fashion. And we arrive at the S for Giants, test passed!

Brief biographies of the Giants

She was a Greek Neoplatonic philosopher and teacher from Egypt, who excelled in the fields of mathematics and science. astronomy, member and head of the School neoplatonic of Alexandria at the beginning of the 5th century.

HIPATIA

He was a German physicist of Jewish origin, later nationalized Swiss, Austrian and American. He is considered the most important, well-known and popular scientist of the 20th century. In 1905, as an unknown young physicist, employed at the Bern Patent Office, published his theory of special relativity.

ALBERT EINSTEIN

It was a recognized Chinese thinker. His teachings were made official during the reign of Emperor Wu, establishing itself as the most popular current of thought in the next 2000 years. Confucius is considered one of the thinkers more important in the history of mankind due to the impact of his philosophy on the world.

CONFUCIO

She was a painter Mexican and Mexico culture pop icon. His work revolves around his biography and his own suffering. Her life was marked by a serious accident that kept her bedridden for long periods, reaching submit up to 32 surgical operations.

FRIDA KAHLO

Imhotep or Imutes, was a egyptian scholar, considered the father of architecture and medicine. He was also wise inventor, astronomer, and the first engineer and known architect in history (approx. 2690 – 2610 BC). designed and directed the Construction of the first pyramid.

IMHOTEP

It was a biochemical Spanish. Graduated in chemical sciences. She was a disciple of Severo Ochoa and Alberto Sols in Madrid with fellow scientist Eladio Viñuela. Both were responsible for promoting Spanish research in the field of biochemistry and molecular biology. Started the development of molecular biology in Spain.

MARGARITA SALAS

He was a painter, anatomist, architect, paleontologist, artist, botanist, scientist, writer, sculptor, philosopher, engineer, inventor, musician, poet and urban planner. After spending his childhood in his hometown, Leonardo studied with the Florentine painter Andrea of Verrocchio. His first works of importance were created in Milan at the service of the Duke Ludovico Sforza.

LEONARDO DA VINCI



ISAAC NEWTON

He was an English physicist, theologian, inventor, alchemist and mathematician. He is the author of Principia Mathematica, where describes the law of universal gravitation and laid the foundations of classical mechanics through the laws that bear his name.

ROSALIND FRANCKLIN

It was a chemical British crystallographer. His works with X-ray diffraction imaging was of great importance in the progress in various fields. They were key to revealing the structure of carbon and graphite, as well as RNA and several viruses, although the greatest importance was his contribution to the understanding of the DNA structure.

NICOLA TESLA

He was an inventor Serbian electrical and mechanical engineer nationalized American. He is best known for his numerous inventions in the field of electromagnetism, developed in the late nineteenth and early twentieth centuries. His patents and theoretical work helped lay the foundations for modern systems for the use of alternating current electrical energy.

MARIE CURIE

She was a Polish scientist French nationalized. Pioneer in the field of radioactivity, was the first person to receive two Nobel Prizes in different specialties –Physics and Chemistry– and the first woman to occupy the position of professor at the University of Paris. In 1995 she was buried with honors in the Pantheon in Paris on her own merits.

MARIA MONTESSORI

She was the first Italian female physician and educator known for the philosophy of education that bears her name and her writings on scientific pedagogy. Enrolled in a school engineering technique for men, although he later studied medicine. His educational method is used today in schools around the world.

ROSA PARKS

She was an activist african american figure important, especially for refusing to give up his seat to a white man in Alabama (United States). For such action she ended up in jail, which was the spark of the civil rights movement, and she is recognized as the First Lady of this movement.

CHARLES DARWIN

He was a naturalist English, recognized for being the most influential (sharing this achievement with Alfred Russel Wallace) of those who raised the idea of biological evolution through natural selection, in his work The Origin of Species, from a process called natural selection.

4. Smell and ephemeral art:

Perfume

from the book *Perfume, the story of a murderer* by Patrick Süskind:

“Every perfume contains three chords. The head, the heart and the base. Twelve notes are required. The head chord contains the first impression which lasts a few minutes, before giving way to the heart, the theme of the perfume which lasts several hours. Finally, the chord is the base of the perfume’s imprint, which lasts several days.”

Centuries ago, even millennia ago, we understood that existence is finite for all things, but we learned to use these ephemeral properties to our advantage,



playing with the duration time of the olfactory effect of each element and incorporating into the mixture, those notes of each chord. Poetically, three olfactory scenarios are created, responsible for bringing back our memory to a past that has been irrigated with the same fragrance.



In the 70s of the last century, experimental artistic projects were carried out with the idea of including the sense of smell by applying it to cinema or live music. Through vaporising different aromas around the venue at times alluding to cherries or chocolate in the music that was being played.

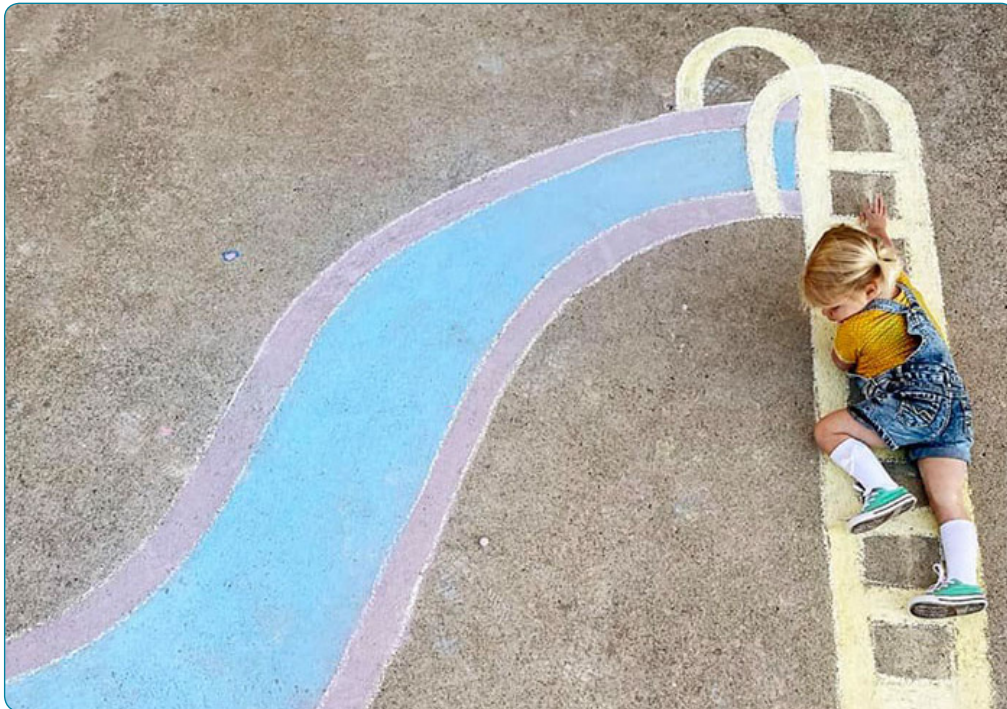
WHAT DOES EPHEMERAL ART CHANGE IN SCHOOLS?

As we have said, traditionally there has been a way of teaching centered on the rational part of knowledge. With ephemeral art, a more creative and intuitive way of learning is encouraged. This way is based on creativity, research, intuition and the development of students' abilities, rather than the repetitive memorization of content. This way of working has always been characteristic of plastic and artistic subjects; however, it has now been seen that both the left and right hemispheres are present in practically all cognitive processes. Therefore, the incorporation (through ephemeral art) of creative processes in other subjects such as mathematics,



language or science, can favor a more appropriate balance in the teaching-learning process of students.

Ephemeral art makes it possible to handle large-format scales, offering the possibility of collaborating with people from different centers, countries, communities... and among different educational agents such as teachers, students, institutions, etc. In addition, within the classroom itself, the classic unidirectional teacher-student process in which the teacher is the leader is also modified. Carrying out group projects of ephemeral art allows collaboration among equals, placing the



teacher in the role of guide and facilitator, leaving space for the students to elaborate and build their own knowledge together. This also relativizes the importance of the individual as opposed to the group and helps students to understand the importance of commonality, both in objectives and in processes of execution, division and distribution of tasks, as well as specialization according to the discovery of individual aptitudes in favour of the group as a whole.

Ephemeral Art and new methodologies

Ephemeral art, by its very nature, is an ideal and effective tool for the implementation of the new methodologies promoted by the great pedagogues of the 20th century. These pedagogical systems emphasise the development, through autonomous and guided research, of the students' own innate abilities and their individual potential. We move from an education centred on the repetitive memorisation of content to the active and meaningful construction of knowledge of the external world and society, but also of oneself. But what are the elements of ephemeral art that make it such a suitable tool?

Defining ephemeral art in a simple and summarised way as an aesthetic expression of temporary duration, we can extract four main characteristics of ephemeral art: expression, process, creativity and temporality. The fact that it is a way of expression implies a constant search and reflection on what defines and characterises us as individuals in society. Ephemeral art allows us to increase important aspects in the educational process such as self-concept, self-knowledge, meta-cognition and self-esteem. In addition, inevitably, self-expression is carried out with the aim of transmitting a message (an idea, a concept, a feeling) to other people, that is, to recipients. Sharing one's own experiences through art and being able to establish connections with others is also a benefit for one's own individual development process. All these aspects are related to the intrapersonal and interpersonal intelligences that form part of Howard Gardner's model of multiple intelligences, proposed at the end of the 20th century, and which we rarely see worked on explicitly in current curricula (sometimes due to lack of time, but also due to lack of tools).

On the other hand, the fact that ephemeral art is conceived as a process implies that the pupil will maintain an active and participatory attitude in the creation of different artistic products, facing real problems for which he or she has to find new

strategies and tools. In this way, ephemeral art offers the opportunity to provide active and pragmatic learning, in line with the proposals of the renowned American psychologist and pedagogue John Dewey. The passivity to which pupils are often subjected also clashes with the proposals of other great educationalists such as Lev Vygotsky and Jean Piaget, who conceive of learning as a process of individual and collective construction (constructivism and socio-constructivism). Through the creation of artistic processes of ephemeral art, a constructive and social conception of learning is promoted in which, through experimentation, students participate in their own learning process, increasing their motivation and their desire to learn. It also encourages a view of learning as an ongoing process, which takes place over long periods of time and in which failure is not something negative that is penalised, but an essential part of the process of developing and constructing knowledge. The fact that the artistic product is not designed to last for long periods of time increases the value attributed to the process to the detriment of the excessive value traditionally placed on the result.

Finally, ephemeral art can occur in a large number of academic disciplines, fostering interdisciplinarity and globalism, a way of understanding learning that configures relationships and syntheses between different knowledge, with disciplines contributing to each other rather than isolating them. This connects the different knowledge that students possess and bases the learning process on previous experiences following the concept mapping and meaningful learning proposed by David Ausubel. Furthermore, the connection established between different people and educational agents (teachers, centres, students, institutions) thanks to ephemeral art allows for the creation of ever larger and more effective joint attention formats (J. S. Brunner).

Ephemeral Art and the classes

The teacher

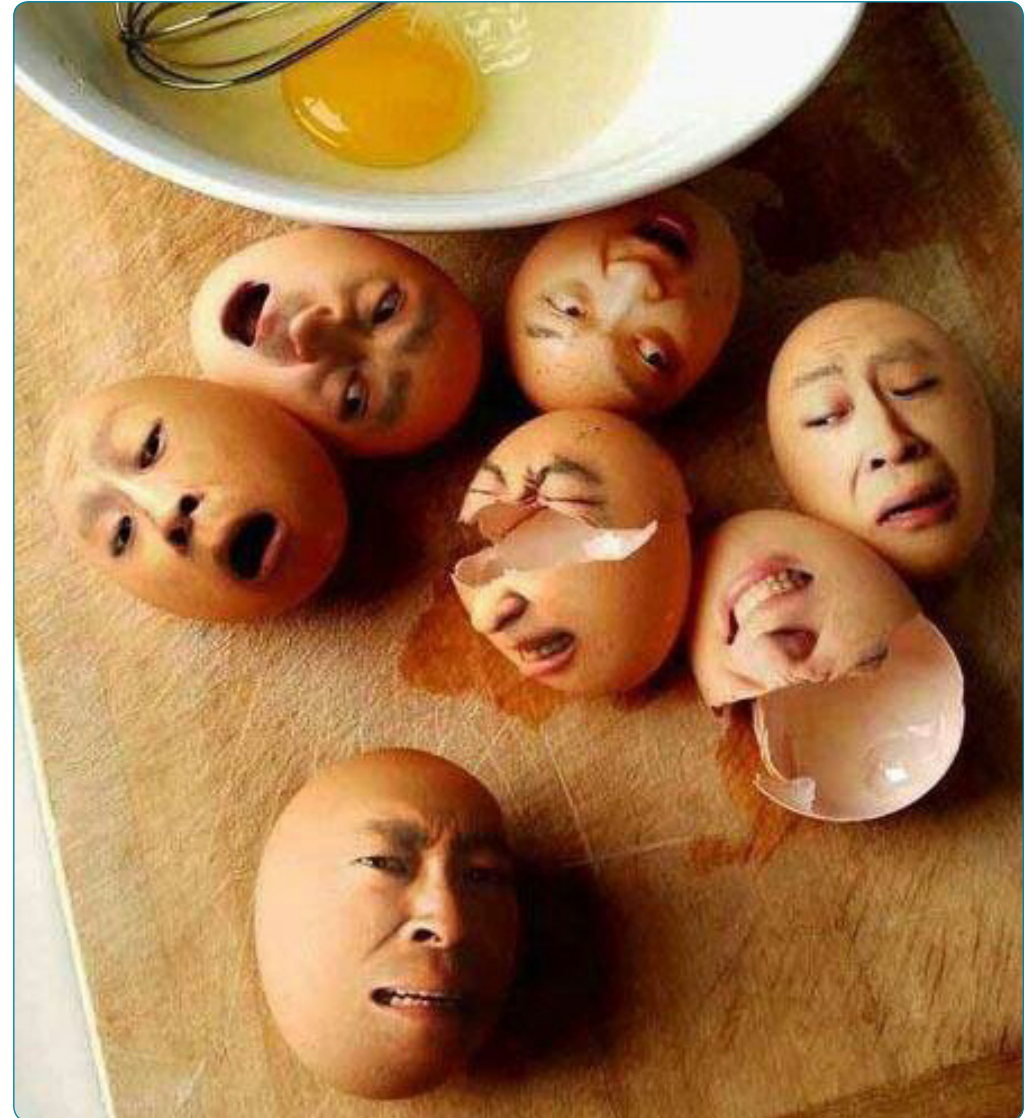
thanks to the implementation of ephemeral art in school education, the teacher is no longer at the centre of the class as the possessor of all knowledge. The teacher now maintains a guiding role, providing and facilitating a stimulating and suitable environment for pupils to develop as the real protagonists. Problem solving, experimentation and research are the basis of this way of learning and teaching.

The students

now they can no longer have a passive attitude towards knowledge, but an active one, as they are offered the opportunity to play and experiment with their own way of understanding the world. They go from being mere recipients in which to deposit the contents of teaching to being active agents of their cognitive, intellectual and social development.

The classes

collaboration and exchange are essential in a large-scale artistic creation process. This breaks down the walls of the classroom, where knowledge and educational agents remain isolated, to create an interconnected, global educational community where everyone is part of the teaching-learning process and part of the transformation and improvement of the educational system itself.



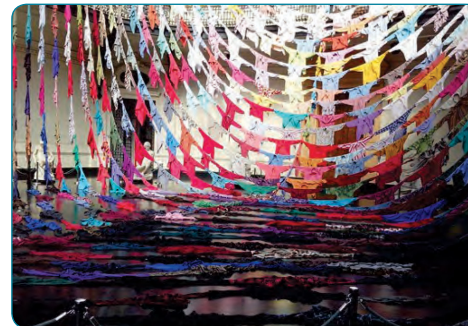
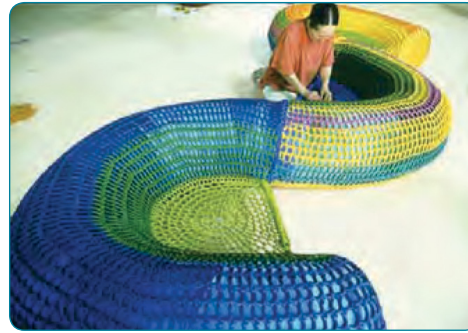
WHAT ARE THE BENEFITS OF EPHEMERAL ART?

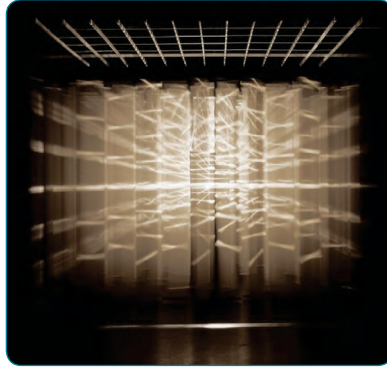
Ephemeral art allows the promotion of everything related to creativity, expressiveness, intuition, critical thinking... Through this type of art, which is not recorded in any material medium in the long term, the free and creative expression of students is encouraged, fostering their capacity for expression and nurturing their self-esteem. With ephemeral art, the emphasis is placed on the creative process rather than on the result, generating a great number of benefits for the students. Emphasizing the process instead of the result means opening the teaching-learning process to research, creativity, expression and self-realization, preventing the pressure to achieve specific results from stifling individuality and subjecting students to excessive pressure that prevents them from expressing themselves and developing freely.

Thus, we can establish a large number of benefits related to the implementation of ephemeral art in schools: fostering creativity, imagination and expression, ability to cooperate and relate to other people, ability to manage and organize one's own abilities, knowledge of one's own learning skills, balanced development of students' skills, the appreciation of art as a tool for expression and collaboration, tolerance towards differences with other people, search for resources and tools for conflict resolution, development of critical and creative thinking skills, increase of self-esteem and intrinsic value of oneself, acceptance of mistakes as part of the learning process, among many others.

KEY COMPETENCIES

Reference to the Key competences for lifelong learning - A European framework (Annex of a Recommendation of the European Parliament and of the Council of 18 December 2006 on key competences for lifelong learning published in Official Journal of the European Union).



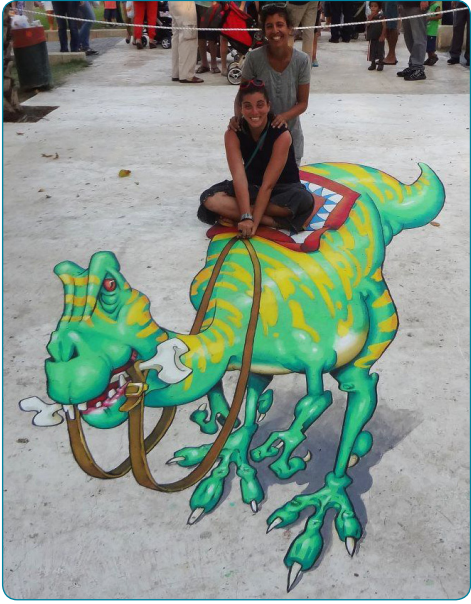


The implementation of Ephemeral Art as an educational tool in schools and institutes allows a large number of different activities to be carried out that favour the development of pupils' competences. This is why we have made a relationship between the eight key competences included in the Recommendation of the European Parliament and of the Council of 18 December 2006 on key competences for lifelong learning and the benefits provided by the implementation of ephemeral art as a tool for the development of these competences. Therefore, through the implementation of collaborative ephemeral art projects, students will increase their personal, social, linguistic, mathematical, cultural, etc. skills in the following way:

Linguistic competence

Is, according to the European reference framework, "the ability to express and interpret concepts, thoughts, feelings, facts and opinions orally and in writing in order to interact linguistically, appropriately and creatively in all possible social and cultural contexts". This linguistic competence must be developed both in the mother tongue and in foreign languages. Ephemeral art, by its very expressive nature, is an ideal tool to develop students' communicative skills in a creative way and from different perspectives. Expression is the very essence of ephemeral art, the expression of





ideas, thoughts, feelings, individual experiences that, moreover, do not last in time. It is an immediate expression, very similar to oral communication. On the other hand, the fact that the projects are carried out collectively implies a constant linguistic interaction, both to organize the different phases of the projects, and to share and express all those ideas and concepts that are to be transmitted and expressed in the artistic work. This linguistic interaction, moreover, occurs with a great variety of people and educational agents, as well as in very different social and cultural contexts, which makes it necessary to master an adequate and rich technical vocabulary, as well as the different registers (formal, informal, artistic, technical) that allow students to adapt to different contexts. Therefore, for all this, ephemeral art is a very effective tool for the development of language skills, since it also provides the opportunity to carry out transnational projects (since art can sometimes be a type of universal communication), also





encouraging the acquisition of foreign languages by all students.

Mathematical competence and basic competencies in science and technology

Refers to “the ability to develop and apply mathematical reasoning in order to solve various problems in everyday situations. Based on the mastery of calculation [...] the ability and willingness to use mathematical modes of thinking (logical and spatial) and representation (formulas, models, constructions, graphs and diagrams)”. Ephemeral art has many and very different ways of expressing emotions and feelings, but it is also an excellent tool for representing one’s own reality. Within visual and plastic expressions, architecture and painting are an essential part of art in general and ephemeral art in particular. The creation of sculptures, with different geometric figures and in three dimensions requires a very precise use of the calculation of volumes, surfaces,

perimeters... as well as a great capacity for abstract and spatial thinking to visualize the designs and be able to handle them. All this, in addition to solving structural problems (in the case of sculptures or ephemeral architecture) is an extremely complete tool when working and promoting the development of mathematical skills. In addition, science and technology-based skills also play an important role in the realization of ephemeral art projects of this type. Thanks to the sculpture or creation of 3D plastic representations brought to reality, they can develop in an experimental and eminently practical way their knowledge of basic natural forces (weight, force of gravity, resistance of materials...), but also other elements such as electrical circuits, electromagnetic fields with small magnets... All this increases their knowledge and understanding of nature through experimentation and their ability to find answers to problems, desires and human needs.

Digital competence

is defined as: “the competence that involves the safe and critical use of information society technologies (IST) for work, leisure and communication”. Also in this case, ephemeral art is useful to us as a methodological and educational tool, since another of the possibilities offered by this type of art is the use of numerous and varied digital tools. Through these digital tools it is possible to make an adequate and creative use of IST to carry out the ideas of the projects, make sketches, models.... For this, the use of graphic design and 3D modeling programs and software can be very useful. There are also programs that allow the creation of simple machines and engines that can offer resources and tools to apply to your creations. These programs allow you to create simple models to which you can apply the laws of motion and kinematics, thus gaining knowledge to apply to your artistic projects. On the other hand, there are a large number of

applications that can be used to manage, classify and handle information efficiently, including the search for new knowledge. There are also a large number of programs focused on editing and creating music and audiovisual content in general that can also be applied to the creation of ephemeral artworks.



Learning to learn

We could consider this competence as one of the most important, since learning can be applied to practically all contexts and situations of academic, professional and personal life. Learning to learn is, according to the European reference framework, “the ability to initiate and persist in learning, to organize one’s own learning and to manage time and information

effectively, either individually or in groups” Thus, ephemeral art projects, both individual and group, can offer a wealth of situations in which to develop learning skills. Above all, when it comes to researching and



conducting an active (not passive) search for new resources and tools to carry out the ideas and creations that one has in mind. This way of learning allows one to build knowledge and skills instead of receiving them in a passive way, allowing one to acquire a greater awareness of the learning process itself and of the facilities and difficulties encountered in it. This increases the student's personal involvement in the learning process, which ultimately increases their motivation to learn and confidence in their own abilities. Thanks to ephemeral art projects, this way of



conceiving learning can be implemented in a large number of subjects.

Sense of initiative and entrepreneurship

Closely related to this is the sense of initiative and entrepreneurship.

In order to have an adequate sense of initiative it is necessary to know one's own capabilities, virtues and difficulties when developing any activity. The sense of initiative and entrepreneurship is understood as “the

ability of people to transform ideas into actions”. This ability requires a proactive attitude in order to face the problems of daily life, whether personal, professional or academic. To do so, one must have a good capacity for planning, organization, management, leadership and delegation, communication... This is worked on very effectively by trying to make an abstract artistic idea a reality, since it requires very elaborate planning and organization, fostering the main characteristic of this competence: transforming ideas into actions. Through the projects the students will have to face different problems and unforeseen events that they will have to try to solve in a proactive way. On the other hand, they will have to try to anticipate them by setting realistic and achievable goals, fulfilling the requirements established by the centers or by the teacher. Looking for innovation and opportunities for improvement will also be an essential part of the process of

developing ephemeral art projects.

Account social and civic competencies

In relation to this, we must also take into account social and civic competencies. These competencies include personal, interpersonal and intercultural competencies and refer to “all forms of behavior that prepare people to participate effectively in social and professional life”. Through teamwork and the development of artistic creations collectively, students will have to have an attitude of tolerance and respect for their team in order to develop the artistic product correctly. In this way they will be able to develop their listening, understanding and empathy skills, but also the ability to negotiate, reach agreements and assertively defend their own interests. In the same way, the management of stress and frustration acquires a fundamental role due to the fact of constantly confronting ideas and opinions with a great variety of people

of different origins and cultures. The high personal involvement in artistic creation and self-expression makes it doubly important to develop all these skills in order to obtain the best possible result as a group.

Cultural awareness and expression

Is understood as the “appreciation of the importance of the creative expression of ideas, experiences and emotions through different media”. In this regard, the best way to appreciate the importance of culture and artistic expression is to become personally and actively involved in the creation of an artistic work that allows one to express one’s emotions and thoughts.

Ephemeral art is one of the most powerful expressive channels, increasing to a great extent the value that students attribute to artistic action. In addition, the great effort and commitment that they establish with their artistic creation will make them

value the cultural and artistic products of other people and social groups.

Experiencing the disappearance of an artistic work that does not last in time can also make them understand the importance of respecting the cultural and artistic heritage that society and human beings have developed throughout history. The search and research of artistic models that drive and inspire their own creativity and expression will also involve them in the knowledge of history and art both past and contemporary, the different currents, styles... The enormous interdisciplinary opportunities (dance, music, theater) offered by ephemeral art will also increase the value they attribute to art as an artistic activity in general, establishing bridges between different ways of expressing and communicating the essence of each culture.

E X E R C I S E

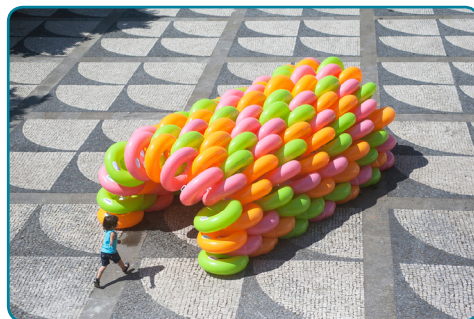
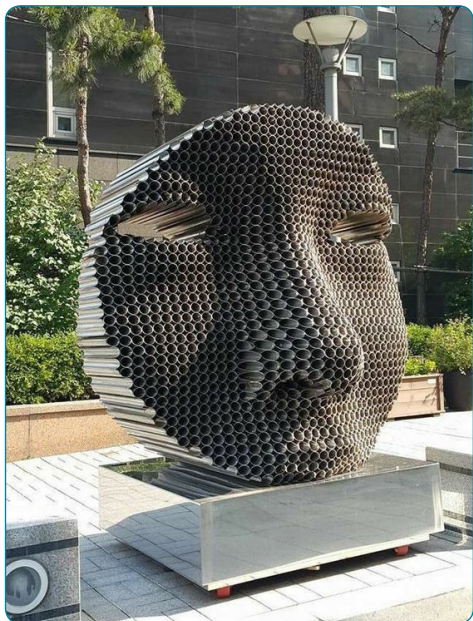
The main objective of this Guide and its Activities is to present them in a way that stimulates both cerebral hemispheres in parallel. First creativity, and after that, by pure logic, the need to solve problems of a mathematical, geometrical, linguistic, computer, social, etc. nature grows, in order to finish the project. To solve these



activities in large format, work teams must be created whose members will have to design, debate, calculate, project, share information, put into practice their sense of belonging, negotiate, give in for the good of the group, locate and recognise themselves in it, seek answers and find consensual solutions....

All this can be put in the way of learning but it is thanks to something key: to include the possibility for each individual to express his or her own creativity because as soon as one begins to create by reinterpreting with one’s own intellect any previous artistic representation, one begins to feel that it is his or her own. What we express through art is our most intimate and deepest self... our essence, and that engine to see the

idea embodied, that illusion, is what leads the group to the achievement of the objective. And by including certain parameters in these activities, we will be getting closer to learning that is hardly perceived as a great effort made, but almost as a game and a pleasant challenge that bore fruit. In short, we propose something that, in a fun way, brings together as many key competences as possible. Sometimes



in a direct way and many others in a cross-cutting way.



Design and construction of a light and transportable habitat

The exercise consists of designing as a team an ephemeral construction inspired by a descriptive text provided beforehand. Participants will be provided with a series of basic elements such as rods, cardboard, fabrics, ropes, adhesive tape, scissors, paints, etc... with which they will have to devise and build something stable and as faithful as possible to the textual description.

The materials they will work with come mainly from waste or from nature itself, and thanks to the lightness of these materials, the resulting projects will be easy to handle, dismantle and ephemeral.

The practical exercise shall consist of several phases:

1. Design of the work
2. 3D digital modelling
3. Construction of a small-scale prototype
4. Large-scale construction
5. Decoration and ornamentation

1. **The design of the work** shall begin with a pencil sketch on paper to define the essential forms of the work. This shall be done by interpreting the instructions provided by textual description.

2. **3D digital modelling.** A virtual, three-dimensional version will be made using 3D modelling software with the information provided.

3. **The construction of the scale prototype** will be carried out using some of the materials and tools mentioned above, suitable for this purpose, such as plasticine and wooden sticks, following as far as possible what has been developed in the sketch and the 3D model in order to verify the correct functioning of what has been modelled in the computer. on the computer.

4. **The large-format construction** shall be carried out after the prototype has been mathematically scaled and the mathematics and the calculation to obtain the definitive measurements.

5. **The decoration and ornamentation of the work**, i.e. its pictorial part, will be carried out after the architectural. The decoration and ornamentation of the work, i.e. the pictorial part, will be carried out once the architectural construction phase has been completed. The use of colour as a resource, textures and textual elements to be chosen.

For the construction of the large-format work, the following materials will be needed.

Aluminium, plastic or wooden ROD with an approximate diameter of 8 mm and a length of 2 m (the material will depend on its accessibility at the time). It could be replaced by tree branches if necessary. This element is intended for the constructive part of the frame or skeleton but will never be an imposed rule.

POREXAN BALLS with an approximate diameter of 10 or 12 mm. Intended to serve as a joint or articulation between the rods.

CORRUGATED CARDBOARD of standard thickness, between 3 and 5 mm and as large as possible for the participants to use. The cardboard should be as large as possible so that the participants can cut it to their liking. This element can be used both for building and for covering, and allows shapes to be cut out to make windows or doors, for example. for example, to make windows or doors. It is also a good surface for painting and ornamentation.

FABRIC with different elasticities and patterns so that participants can experiment and distribute them throughout the construction. and distribute them all over the construction. // It can be used to cover, to make a roof, something as a roof, something like a curtain, and can also be decorated with paint.

TAPE, WIRE, STRING, ROPE, SCISSORS, PLIERS, TOOTHPICKS. All These elements can be used to glue, sew, cut, join and assemble the pieces.

M E T H O D O L O G Y A N D T O O L S

for the Implementation of Ephemeral Art in Schools

Methodology and tools for the practice of ephemeral art

Ephemeral art comprises an infinite number of variants and ramifications, as we have seen throughout this guide, although some of them, due to their characteristics, can only be implemented where there are specific climatic, orographic or cultural conditions. For these reasons, we will now list the tools, skills and contexts that are essential to facilitate the development and achievement of specific objectives. In this case we are going to focus mainly on plastic, sculptural and architectural tasks.

Setting and context

First and foremost, the idea is to be able to undertake work on a larger than human scale, with dimensions that require the participation of several people. We must therefore have an open-plan physical space where small teams can operate safely and unhindered in tasks such as the processing of large-format materials, the extensive presentation of components, measurements, cutting, bonding, painting, etc. Good ventilation is important because of the possible use of products such as adhesives or resins, which contain toxic elements.

In certain cases, outdoor space is required, although this has obvious drawbacks. is required, although this has obvious drawbacks. Adverse weather conditions mainly, but also if we need to spend several days on the construction of the work, and this requires temporary storage at the end of each day's work and subsequent reassembly.

Good artificial lighting is also required to maximise working time at certain times of the year. Once the scenario has been detailed, we return to the initial phase of the project, where we will need obvious and frequent tools such as pencils and stationery

-more specifically artistic drawing-, since every project within the plastic arts must begin with handmade sketches, shared and approved by the team of people involved in the achievement of the objective.

Digital and analogue tools

Computer programmes will help us to raise the level of the designs in terms of geometrical precision and clarification of numerical and mathematical aspects. The free 3D modelling programmes available on the Internet, such as Sketchapp or Tinkercad, are particularly useful. Without forgetting the more conventional carpentry or decoration tools for cutting, painting, sanding, joining, etc., as well as clothing and safety elements, such as goggles or gloves.

Materials

This aspect is the one that allows the greatest variety of choice, as there are a multitude of possible variants and techniques, and the very nature of ephemeral art invites us to use spontaneously or improvised elements found in our environment. Whether they are waste from human consumption, such as wood from old furniture, discarded plastic packaging, cardboard packaging or often biological and mainly vegetable, the latter can be the remains of felled or dead trees, leaves or flowers of plants, stones with interesting shapes or textures polished by time and water, bird feathers, insect exoskeletons, skeletal remains such as bones or skulls, ice, snow, beach sand, etc. In many cases, it is also necessary to use industrially processed elements of adhesion or mechanical bonding between the parts, such as screws, nails, specific glues, adhesive tape, cordage, etc.

Human resources

None of the above is useful without the potential of imagination. The greatest

resource we possess, which is our creativity and personal effort. And our driving force will be the desire to express feelings through art, without forgetting that in order to achieve more ambitious artistic objectives, with greater visual impact and social notoriety, we need to join forces and work as a team, sharing the work and sharing the experience of creating and overcoming common difficulties.

LIST OF EPHEMERAL ART EXPRESSIONS

To complete this guide we are going to include a list of different ephemeral art expressions. These types of expressions are only a part of the total, because everyday new ways of expression and types of ephemeral art are being created all along the world.

Ephemeral art expressions

Ephemeral sculpture, ephemeral architecture, ephemeral painting, live music, live theatre, live dance, mandalas, land art, ice art, graffiti, gastronomy, gardening, water shows, light shows, pyrotechnics, magic, aerostation, hairdressing, fashion, make-up, tattoos (with non-permanent inks), piercing, perfumery, action art, collage, assemblage, happening, environment, performance, installation, action painting, flash move, body art, theatre events, gesture painting, live poetry, live comedy and monologues, lyricism, beat art, funk art, cockfighting, impro music, theatre, painting, dance, circus, multimedia and audiovisual shows, laser shows, kinetic art, arte povera, sound art, video art, performance art, interactive art, project art, idea art, minimalism (applied to different arts), night art, neon shows, shadow art, origami...

