

# Art Thinking: Symbiosis Education & Art

An antidote to heal the aftermath of a Prussian education system in higher education.

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## **Abstract**

The Prussian educational system, created more than two hundred years ago, is still active in Mexico and other countries. This hegemonic system did not engage with students, their community nor their social reality. Other models have emerged that aim to humanize education and use arts as a rhizomatic blueprint to rethink teaching. Art Thinking is an unconventional strategy and opportunity to transform how cognition is built and shared inside and outside the classroom. It is not about producing art but using arts as a methodology. This path requires educators to be aware of their current teaching processes so they can transform the manner they educate. In this paper (1) we analyzed some pedagogical approaches that support arts in the educational context, (2) exposed the value of the symbiosis of art and education (3) and discussed some applications of Art Thinking in Higher Education that motivated to learn, think and act.

Keywords: *Art Thinking, Innovative Education, Higher Education, Pedagogy, Tec21*

## **1. Introduction**

Talking about education in Mexico is complex due to the telluric movements that escort the multiple reforms in education, legal basements and aims influenced by politics, beliefs and the market itself. At the beginning of the XVIII century, the clerical education implanted 300 years before was displaced by a scientific education oriented to progress. Years later, the model of a basic, universal, free and obligatory education arrived. Higher education was concentrated in the literary and scientific institutes, which were located in the state capitals. In the first governments of the Mexican Revolution, the education system had the only purpose of preparing workers to rebuild the country through science and technology (Rodríguez & Villa, 2006). In the 30's, private universities emerged and focused on other dimensions such as economic

development, productivity and commerce. At that moment, both the public and private models had no interest in emotional processes, critical thinking, diversity, accessibility, play or motivation.

This narrow and positivist vision of education carried out several social damages, such as competition, individualism, discrimination, conditioning, emotional violence and materialism (Doin, 2012). At the beginning of the 20th century, new paradigms emerged in basic, middle and higher education, pedagogical experiences focused on action, freedom and the autonomous construction of learning, rethinking everything demanded by the traditional school. These alternative pedagogies are more human visions featured by its multidimensionality, their multidisciplinary strategies that nurture the development of human beings living collectively (Perez, Africano, Febres, Carrillo, 2016) and the intellectual-critical emancipation of citizens, the ones who will build, implement changes and make decisions for the common good. The pillars that support them reconceive the dynamics involved in the acquisition of knowledge towards a more social perspective. Also, redefine the role of the educator and the student, into a more horizontal relationship.

## **2. Bulimic, banking and violent pedagogies**

...the essence of the Prussian school inhabits the classrooms of the 21st century; standardized tests, age division, obligatory courses, content disconnected from social reality, the grading system, pressures on teachers and students, a system of rewards and punishments, strict schedules, confinement and separation of the community, the vertical structure... (Doin, 2012).

The current model of public, free and mandatory education (Doin, 2012) has its origins during the late 18th century and early 19th century in the already vanished Prussia. This strategy was quickly replicated in Europe (Russia, Poland, France, Spain, England) and America (United States, Argentina, Chile, Mexico) permeating countries that search for a progressive and modern education, over time, this model expanded internationally with the speech of accessible education for everyone. However, it was a contradiction, coming from despotism indirectly perpetuate elitism and the division of social classes (Doin, 2012), it was an hegemonic and absolutist movement that had the intention of domesticating society, creating docile, obedient and silent subjects with no will of their own who could be easily convinced to attend at the latent possibility of war.

This education was influenced by an industrial economy, which sought the greatest profit with the least possible effort and investment (Doin, 2012), an administrative and servant education at the service of government. This was a hegemonic vision where the institution, based on power dynamics, placed only necessary structures (Araujo, 2005). This type of education worked with scientific formulas, general laws, and linear processes that were unrelated to the individual and their social reality; it was by their nature, a dehumanized pedagogy.

This system was based on mechanized processes and repetition; certain steps executed in a specific order. Students in closed periods, divided by age, and in homogeneous groups, forced to memorize regardless of the content, that in many cases, was fixed and designed by people outside the educational context (Doin, 2012). Those professors shared and preached only preestablished information, macro narratives implanted by the system. For example, the same eurocentric western hero stories and patterns over and over again. The already manufactured answers in politics, history and philosophy, in other words: a linear and immovable education. Knowledge is biased, it changes permanently, education has to be a process of discovery, not of learning the truths (Doin, 2012). This education was based on dogmatic, repressive vertical teaching processes (Araujo, 2005), there was no space for the voice of the teacher and the student.

Many educational institutions around the world, including Mexico, maintain these century-old pedagogical models. The traditional positivist path and entrenched in cause-effect processes (Acaso, 2017), cannot function in the same way (maybe they never worked) since they do not follow one of the basic rules of life: The only constant is change, and change is complex, its anchored with culture, politics, economics, etc.

For education enthusiasts and revolutionaries, the traditional way of teaching is synonymous of a stagnant education that accentuates submission and silence in students (Araujo, 2005). A bulimic education, which focuses on a process of memorizing-vomiting-forgetting (Acaso, 2019), a banking education (Freire, 2010) whose oppression devices place the student as a fixed object to which pre-established knowledge is inserted and a violent education (Giroux, 2011) that overall kills imagination. All of these pedagogies inevitably result in a death of the passion for knowledge (Acaso, 2017).

Araujo (2005) affirms that although there are favorable changes in pedagogy, an obsolete educational system still persists, which does not question the object of knowledge and the student's learning processes, those that encourage intellectual emancipation. The main problem is in the way in which we paradigmatically conceive education.

Hicham Benohoud, a Moroccan professor and artist, was able to generate and capture the classroom as a prison through photography. In his photographs, the students are captured as how they need to behave, they are deprived of their freedom since there is a hierarchical and dominant figure present, marking what and how they are taught (see Image 1). The school as a form of social control where students are numbers, grades, and statistics (Doin, 2012). In his series "the classroom" two groups of students can be observed: some of them in revolutive, radical and surreal corporal positions; and the others, apparently learning and following the student paradigm: an obedient, militarized and domesticated being without voice and imagination. His photographs show a tension and a contrast created from the relationships between individuals and the institution, a sign of rebellion and conscious disobedience. He exposed the lack of motivation of students and himself due to the fixed curriculum (Sawa, 2018), and where only the strange camera was a spark of their curiosity.



Image 1. Photograph part of "The Classroom series" by Hicham Benohoud

Benochoud (2017, as cited in Sawa, 2018) wonders how to return to education into a place without fear, in which the uniqueness of the students is thought, that they have different ways of learning, and how to make the classroom a comfortable, open and stimulating space.

### **3. Pedagogies: Of hope, of imagination and question**

The dialogue of Marín, Camnitzer and Helguera (2014) contains many ideas that are related to our concerns in pedagogy and that we seek to explore, share and activate in the educational environment, some of them are: education as an open field that stimulates questioning and unlimited creation. Education that is able to prepare students for a search for the unknown. Education that places questions as the origin or starting point. Education that allows the entry of new codes. Education that seeks to rearrange knowledge and make unexpected connections. Education that includes speculation, analysis and the subversion of conventions. Education that frees the subject and leads him towards an intellectual emancipation. Education that enables creatively to solve social, material and spiritual problems. Education that addresses all the possibilities that exist. Education that encourages conscious disobedience. Education that emphasizes critical thinking over material creation. Education that orients itself, why not, to unlearn. Education that works under pillars of horizontality and collectivity. Education that nourishes spaces focused on criticality, plurality and discussion. Education that promotes environments where students can reinvent themselves. Education that allows students to experiment and learn autonomously, while at the same time solving problems vital to their experience and existence in the world and an Education that encourages them to find their own revelations.

#### **3.1. Pedagogy of hope**

The Brazilian educator and philosopher Pablo Freire, gave us the vision of a pedagogy of hope (1993), where the idea of the developing an education with the student and not for the student exists, both figures sow and flourish a critical

vision of the world they inhabit. Freire thought that the voice of the teacher had no meaning without the voice of the student, both voices are equally powerful. Likewise, it tells us about the relevance of that informal education that is made up of knowledge composed by existential and vital situations outside the academy that forge the life of a human being (Verdeja, 2015). This holistic vision of the way we learn about the world makes sense by not making a dichotomy between the life of a human being inside and outside the classroom. Alberto Silva (1972) exposes that Freire's relevance lies in the fact that he was enthusiastic when thinking about the education of the future, one that will promote the formation of free men in just societies. Maria Verdeja (2015, p. 3) comments that for Freire, "the reason to be of education is the transformation of an unequal and unfair world into an ethical and deeply supportive world". For this, a critical pedagogy of the world is necessary, contrary to hopelessness and dystopias, which makes it possible to make visible the resistance and all the possibilities that human beings have to rebuild our life in community, "a vision of education based on rigor, research, a critical attitude, risk, humility, good judgment, tolerance, joy, curiosity, competence and other virtues, all bathed in hope" (Verdeja, 2015, p. 3).

For Freire (1993), education is not capable of solving every issue, but it is a device where the possibilities of transforming and changing social life live. He promoted an internal search of our being; where we can reconfigure or reinvent from our own questioning and external, by approaching the immediate environment and those other realities that need to be visible and heard. The teachers then, we have to live our work with hope, believing that we can impact the existence of students and they in turn in the existence of other realities. It is not about changing the world with a subject, activity or task, it is about stimulating the thoughts and feelings of a student (or several if we are lucky) from the sowing of questions, intellectual curiosity, imagination, critical thinking or any elements that can transcend later in the reinvention of society, their practices, policies and culture (Freire, 2010). This is the real change he was looking for.

Freire pursued the idea that it is relevant that educators ask themselves what is their understanding of the act of teaching and the act of learning. In an old interview (Paulo Freire, *Pedagogia*, n.d) he stated: "You cannot teach anyone to love, you have to love, the only way you can teach love is by loving... I believe that love is the ultimate transformation... The educator has to be sensitive, the educator has to be an aesthete, he has to have taste. Education is a work of art... the starting point of education is in the cultural, ideological, political and social context of the learners. It doesn't matter that this context is spoiled. One of the tasks of the educator is to redo this... in the sense that the educator is also an artist: he redraws the world, he repaints the world, he rewrites the world, he redances the world...". Educate as an act of love and education as a work of art.

### **3.2. Pedagogy of imagination**

Greene's (1995) essays on education, arts and social change notes the importance of imagination and empathy, to cultivate in students critical, self-reflective and active citizens. Likewise, she mentions how relevant it is to exercise thinking our own thoughts (metacognition) and to expand our



consciousness. For her, the classroom is a collaborative search between teachers and students (Maxine, 1995). Greene (1995) sees the arts as central to these dynamics to stimulate students' imagination, connect with their emotions, challenge their acting, and perceive the world differently. Like Freire, she encourages educators to create learning spaces that are open, inclusive, encourage creativity and social transformation.

### **3.3. Pedagogy of questions**

Araujo (2005) and his question pedagogy, exposes the relevance that the student must base his learning through the reflective use of the question and, from this dynamic, build and direct his own knowledge. This, as Camnitzer (2015) mentions, positions the question as the compass that will mark the path of all the revelations that the student will find when approaching or trying to solve any challenge. Araujo affirms much of what Greene and Freire pursued; the teaching processes must be democratic, humanistic, participatory, controversial and critical. Araujo (2005) bets on a true change in pedagogy, one that results in deliberative men and women, in the current and future generations of young citizens with freedom of decision and choice, committed to new values and social, economic and political changes that the world they inhabit demand. For his part, the author of critical pedagogy, Henry Giroux (2011) exposes the importance of an education that encourages the production of agency and narratives that allow the student to broaden their perspectives on the world and on the relationship with others and with themselves. A collective intelligence working to solve with will, imagination and empathy the wicked problems that are part of the complexity of the world. Thus, in this small group of authors, from different times and contexts, we can find endless coincidences and affinities.

## **4. The value of the symbiosis of art and education**

From these previous premises, many questions arise; How to make art and education coexist? What are the commonalities between a school and a museum?, between an artist's studio and the classroom? What do we educators share with artists? What are the tensions and affinities between pedagogy and the arts? If I am a chemistry, physics or a mathematics teacher, how can I transform into an artist? If I'm interested, how do I get started, where can I find resources? What virtues does art have that other great spheres of knowledge do not have? Betty Marin (2014), in her book *Art and Education*, proposes from deep dialogues with Pablo Helguera and Luis Camnitzer, both artists and educators, a review of pedagogy and the arts to find coincidences and starting points, since both dimensions share motivations; among them, that of learning, questioning the multiple realities that inhabit the world and producing new knowledge.

One of the first revelations that the author shares with us is the clarity with which Luis Camnitzer - after many experiences and comes and goes - affirms that "art is a tool to acquire knowledge, a form of thought and a metadiscipline (Camnitzer, 2014). This last concept means that art has the potential to become an orchestra director; which involves other epistemological fields, gives them a

place, questions them, informs them, activates, reconfigures and energizes them. In other words, the field of qualitative configurations and connections where art lives, informs and enriches science (Matadero Madrid Education Group, 2017) technology and other lineal-rational thought disciplines. Furthermore, this way of approaching uncertainty, the absurd, the translinguistic, the tremendous and strange (Fantagoria and Lloro, 2021) becomes relevant for projects where the causal, logic, repetition and reason are not enough.

As for the thought, another of the premises that Camnitzer (2014) gives us to reveal the true intention of calling art, is precisely its relevance around the cognitive processes that arise, beyond seeing art as a form of superficial production of contemplation or collecting (Matadero Madrid Education Group, 2017). Camnitzer reaffirms that it is more important to question oneself, to ask questions, to reflect without even getting anywhere, expanding knowledge and triggering imagination, a true active critical pedagogy.

It is about fostering students' divergent thought processes that do not necessarily derive in answers or into solving a problem. For example, In the Design Thinking framework, there are 5 general steps that go from A to B (Empathize, Define, Ideate, Prototype and Test). To solve a problem, you need to walk in a linear direction from step one to five. Art Thinking is more about creating the problem, in other words, creating A, or B, art must not only solve existing problems, but also raise and formulate new and interesting problems. For this and much more which I will develop later, artistic thought has a freedom that other ways of thinking do not have and which can lead us to renewing pedagogical attitudes.

A divergent education based on arts, encourages self-learning, delving into the mysteries of the unknown, demystifying them and overcoming them to then face new mysteries, it's not poiesis, it's praxis. Art is about knowing, unknowing and recognizing. Pablo Helguera (2014) exposes the relevance of art as an antidote, a tool or a process so we can learn about the world and understand it better. Likewise as a strategy composed of infinite ways to challenge a problem, paradigm or event. Art is a territory of experimentation that is not possible to achieve in other disciplines. From its autonomy, it has great potential to take us to ambiguous territories where nothing is definitive, where all the premises can be questioned. Art becomes a very fertile place to think about things in different ways. Marin (2014) comments that art has the ability to challenge what we consider to be reality. It opens perspectives for us (Greene, 1995), it helps us understand otherness by imagining and representing that otherness.

Camnitzer (2009) highlights the ability of art to make radical connections, only its inexplicable qualities can expand knowledge and not only that, it can rearrange it and always push the limits. Juan Fernando Herrán (2004), in his essay *Papaver somniferum*, becomes a reporter and an artist, a traveler and a sower. Through this artwork, it triggers conversations as a result of everything that is behind the beautiful poppy flower (see Image 2), which exists in different territories, provoking different ideologies. While in Turkey it is a mesmerizing red landscape, in his native Colombia, its blood, drugs and violence. Herrán brings us closer to the intrinsic relationships that exist between art and disciplines such as sociology, archeology and history. The artist's gaze



Image 2. *Papaver somniferum*, Juan Fernando Herran

reconfigures knowledge, shakes the status quo, makes other realities visible and dynamites thought. The artist becomes a researcher.

Art then works as a magnet for other disciplines and teachers, interested in approaching the projects to creatively produce new activities, challenges and discussions. For his part, Ana Lucia Frega (2006) tells us that art opens up an infinity of possible worlds and gives us a meaning to life. It drives us to build a personal and unique path where the threads of beauty, truth and goodness are combined in a fertile fabric of objects, ideas and actions that enrich everyone. Therefore, the pedagogy of art is a necessity of the human spirit.

The Black Mountain College, during its 24 years of existence, put art at the center of education (Black Mountain College, 1934). For those who had the opportunity to teach and study there, art was a province in which all the problems of life were reflected, not only problems of form (proportion, composition, balance), but also spiritual problems (philosophy, religion, sociology, economics), for this reason, art was considered an important and rich medium for the education and development of human beings in general. Art goes through everything, it comes before language, it is primitive. Art dialogues with death, pain, loss, youth, sexuality, loneliness, darkness, in other words, it articulates with life, with everything that it means to be human. Art is a vehicle that enables translinguistic experiences (Fantagoria, 2020) that cannot be summoned by any other way.

In this school surrounded by nature, women were encouraged to think critically and explore their own self-determination (Black Mountain College, 1934).

This place was a space of freedom and creation that undoubtedly left behind great artists and thinkers, among them: the genius of color interaction Josef Albers, his partner the fantastic textile designer Anni Albers, the composer and music theorist John Cage, the dancer and choreographer Merce Cunningham, the designer, architect and inventor Buckminster Fuller, among others.

Another character worth mentioning is Lazlo Moholy Nagy, painter, sculptor, photographer, artist, designer, and other multiple roles. He believed that humans possess deep wells of creative energy that can be used to transform ourselves and our culture (Margolin, 2016). He always wondered if he, from his position as an artist and educator, could contribute to a more egalitarian and humane



society. He wanted to create a new social purpose for art, one that will ensure the artist an important role in organizing and building social life. Lazlo and his colleague Joseph Albers bet on the power of art to transform culture (Albers, 2019), both thought that artists belonged to the vanguard of social change and should strive to make visible the characteristics of a utopian society through material practice. Lazlo (Margolin, 2016) believed that art was not an isolated practice in its own aesthetic field, but that it had an intrinsic relationship with politics and social life. For his part, Albers believed that the purpose of art was to reveal and evoke visions (Fundación Juan March, 2014).

Another interesting element that lives in art is the uncomfortable. This state takes us out of our daily life and leads us towards learning zones and unknown territories, it pushes us into the mystery. For Camnitzer (Matadero Madrid Education Group, 2017, p. 21) "it is what marks the limit of what we know. It is what allows us to continuously move from the area of knowledge to the area of ignorance...." it allows us not only to know the new, but to dis-know and re-know the old through new unprejudiced visits. This means that in artistic thought, nothing is taken for granted, everything is subject to being reviewed or rearranged. In education it is synonymous of unlearning. The uncomfortable is often unclassifiable, it is difficult for us to place it in categories or in familiar places, in this new sensations, art can guide us.

The uncomfortable makes us vulnerable, strips us apart. The discomfort leads us to ask ourselves deep questions, questions that are not easy to handle. This state of mind and heart, leads us towards powerful aesthetic experiences, not understanding something does not imply that there is no resonance (Fantagoria and Lloró, 2021). The uncomfortable pushes us to turn our values around, leads us to inhabit other realities and to transcend the canons of our mental, social, and bodily realities. The uncomfortable makes us broaden our experiences as human beings, it seduces us, and leads us to altered states of consciousness without the use of drugs (Fantagoria and Lloró, 2021).

Finally, let's bring play to the table. Joseph Albers bet on a place where the discoveries are developed, at least initially, through undisturbed, independent experimentation and, therefore, without preconceived ideas (from the text *Teaching Form Through Practice* of 1928). A playful beginning that builds courage and gives students the opportunity to create in a state of *epoje* or free from prejudice. Starting with play is a natural transition, let's remember that animals play before hunting or surviving (Huazinga, 1938). The Spanish curator Grazia Quaroni (2001) highlights that art is a universal need and, like play, it is not a practical need linked to survival, like eating, but rather a spiritual and intellectual search.

In the human world, playing is part of a resistance to reality and will always be a safe way to trigger research, imagination and emotions. Play as a tool of transgression and an attractive complement of the creative process, also considered as a functional cognitive tools, a way to make sense of the world (Zimna, 2019). Humans who in the act of playing find stimuli and revelations. Humans understand the world through play, and throughout life we need playful moments in which some unusual rules make us forget the others, those imposed on us by daily, family and professional life routines, a moment in which reality is paused and freedom (Quaroni, 2001) and intuition are given a place. Overall,

art is a playful psychomotor activity (Acaso, 2017) that can help humans in the navigation of complexity. With this brief framework, we explore some of the virtues of arts in pedagogy. Art is education and education is art, one word only makes sense once it is inside the other (Matadero Madrid Education Group, 2017).

## **5. Art thinking**

Art Thinking is presented as an opportunity to transform the way knowledge is built and shared inside and outside the classroom. Is not about producing art, but about using the arts as a methodology. This perspective invites us educators with will, to transform into artists during the preparation of our classes and at the moment where we interact face to face with the students. In both stages, we can make use of the visual arts (graffiti, street art, drawing), sound, scenic (dance and performance), literary (poetry), digital, architecture, cinema, etc. All those forms of artistic thought that can detonate inside and outside the classroom the desire to learn, think and act in students. Although by its nature, Art Thinking is a rhizomatic strategy, there are 4 pillars proposed by Maria Acaso (GED 2017, Acaso 2017) that are presented as a first set of roots which can serve as a starting point and compass for daring teachers who wish to venture into this territory. This quartet are: divergent thinking, pleasure, education as a cultural production and collaboration.

## **6. Divergent thinking**

Scientific thought is not the only one capable of generating valid knowledge. Divergent thought has as its pillars subjectivity, plurality, openness, imagination, diversity, among other virtues. This type of thinking approaches a problem or phenomenon from different perspectives, even though they are absurd, impossible or only speculative. It could be said that divergent thinking is synonymous of critical-creative thinking. The raw material that feeds it are questions, rhetoric, fiction, play, etc... This way of thinking about the world without norm, complex, plural and liquid (Acaso, 2017) invites us to ask ourselves uncomfortable questions, interrogates us and invites us to make decisions. It connects us with the key problems of our social reality and reunites us with the everyday. It creates in the student's journey emotional, indeterminate, open experiences, amorphous, that dissolve, recombine, die and resurrect (Acaso, 2017). Divergent thinking invites us to create the problem, not to create solutions.

## **7. Pleasure**

The arts work from the aesthetic experience, where pleasure becomes the center (GED 2017). For a pedagogy to become 'sexy' (Acaso, 2017) it is necessary to start from curiosity, this will open the door of attention, which in turn will trigger emotions and these will naturally lead to significant learning. True learning is emotional, therefore it is necessary to touch the deep fibers of the student, for this reason as educators, we must invest our effort in creating

experiences of estrangement, that is, configuring stimulate that capture attention, sustain it until an emotional bond is generated and starting from that state, build or deconstruct knowledge. It is not an easy task, it takes time to be able to put together a lesson with these components, and at the same time we must remember that we are fighting against limited attention and bait derived from today's digital platforms like social media. Keeping the student hooked is a real challenge, that is why our classes must amaze and surprise, they must be unexpected, we must know how to handle improvisation as a combat against fixed structures. A sexy pedagogy requires that each class be a performance, where anything can happen and the student cannot predict what will happen next. It is about migrating from the comfortable to the uncomfortable, from the descriptive to the narrative, from the predictable to the unexpected, from the contemplative to the experiential, from the island to the node (Acaso, 2017). In this pedagogy, the student becomes an active agent, with a voice, capable of making decisions and agency to appropriate the contents and space. Also, it becomes relevant to recover the body and give it a leading role in education (GED 2017).

## **8. Education as cultural production**

The classes become canvases, stages and creation spaces. The tasks and activities are transformed into performance, drawings, sound pieces or fanzines. The possibilities are endless; this is what makes it possible to borrow artistic thought. The classes are transfigured into cultural productions, which move students from the inside and out, from the individual to the collective, making sharing knowledge a fun, exciting, pleasurable epistemological experience. Art Thinking develops cultural productions that are neither art nor education, but rather a transformative experience that remains in the middle (Acaso, 2017).

## **9. Collaborative Projects**

Do it with others (DIWO) is an acronym that calls to create, think, feel and act from a shared vision. Developing collaborative projects is not an easy task, since it requires a different will, a resilient, empathetic attitude, contrary to the individual search. Collaborative projects are complex and slow, but they can create affective paths. Meeting otherness requires temperance, listening, dialogue and generosity.

Today the complex problems we face are impossible to combat from the trenches of the ego, from the individuality of the disciplines. And, we can detect that Art Thinking is presented as a questioning practice without borders that develops intellectual skills and creates critical knowledge from questioning dynamics that are triggered by artistic processes and methodologies.

## **10. Discussion: Applications of Art Thinking in higher education**

The Architecture, Art and Design school of Tecnológico de Monterrey boost experimental methodologies that impact education. This innovative education

spirit allows us to refresh the system, even though it is too early to make conjunctions and to have strong results, the panorama looks encouraging. The past three years, we have been using Art Thinking as a strategy to arouse curiosity and dialogue, trigger emotions, encourage reflection and approach to wicked problems. We restructured some activities into poetry, drawing, performance and street art. Everything starts with questions like: What if we teach architecture inspired by films like *Dogville* by the Danish director Lars von Trier, by placing colored tape on the floor to think about the possibilities and the dynamics of a space. What if students have to use 3D glasses to decipher political information? What if we teach the concept of a module with toasts? ¿What if we share the circular economy pillars with a shadow theater? What if we trigger serious research around water issues through a board game? What if we teach neurodiversity with the creation of kinetic hanging sculptures? Let's take a more structured example: In the third semester of Industrial Design, there is a class called Visual Representation, which aims to teach different drawing techniques and concepts so designers can communicate their ideas visually. One of the most complicated subjects, which students suffer from is perspective. Configuring three-dimensional objects in the two dimensions of the paper is a complex process, which requires, in addition to attention, a lot of practice. To address this issue, we were allowed to make an Art Thinking movement. We created a wooden toy puppet called robotin, which is made from 3 different volumetric basic figures: A cylinder that represents the head, a cube that represents the torso, and 4 prisms that represent arms and legs. From a different narrative, it appeals to the curiosity of the students. I used this deliberative artifact as an excuse to get their attention and with that inertia, teach about how the primitive three dimensional figures move into space. Once they connect with this personage, they were able to touch and move the different parts in front of their eyes, so they can see how the edges and vertices change into space. The results were much better than in other semesters where we stuck to the rigorous academic plan.



Image 3. Robotin, a wooden toy to teach perspective

## 11. Conclusions

Art is an independent form of thought, knowledge and action that helps us face the unknown, acquire awareness, merge emotions with intellect, play, acquire

critical lenses, connect with otherness and approach social phenomena with limitless imagination. This research is about using arts as a pedagogical methodology, transforming how knowledge is configured in the classroom. It transforms educators and students into artists and courses, activities and final projects into cultural productions that are critical, emotional and spiritual. Art Thinking can assist teachers from all disciplines into the summoning of a genuine desire to think, learn and act. The relevance of provoking critical-creative thinking and motivation in such complex times has become vitally important for all those who have dedicated themselves to education as a strategy to change any scenario of injustice, indifference, violence and tyranny. Education is an act that never ends, this framework based on hope, imagination, questions and arts is an open pedagogical attitude at the service of all those divergent educators that are open to try new ways of sharing, creating and deconstructing knowledge.

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