

Art and learning: an in-depth study of art's educational potential

Arte e apprendimento: uno studio in profondità del potenziale educativo dell'arte

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Abstract

The purpose of this article is to present the value and effectiveness of teaching artistic languages to students, particularly in multicultural contexts. The article will first address the role of direct experience, specifically the way in which emotions and movement contribute to the development of awareness. Taking into account recent developments in the field of neuroscience, this article will underline how artistic workshops prepare students for both general and cross disciplinary learning. This article will also address the strong connection between artistic workshops and the development of skills, specifically life skills, as defined by the World Health Organization. To better convey the positive impact of artistic workshops on self-esteem and participation, I have also included excerpts from interviews with teachers and artists, carried out over the course of my doctoral research. The collaboration between the Civico Zero initiative carried out by Save the Children and the MAXXI Museum Department of Education for the benefit of MSNA, provides evidence that students can relate to works of art and through that relationship, explore their personal histories.

Keywords: art; intercultural; learning; neuroscience.

Sommario

Il presente articolo si propone di mostrare i motivi che rendono l'uso dei linguaggi espressivi particolarmente efficace per l'apprendimento in generale e in contesti multiculturali in particolare. A partire dal ruolo dell'esperienza diretta, delle emozioni e del movimento per lo sviluppo della conoscenza, tenendo conto anche delle recenti teorie nel campo delle neuroscienze, viene sottolineato come i laboratori artistici abbiano un valore propedeutico all'apprendimento delle diverse discipline ed educativo in senso lato. Viene inoltre messa in risalto la relazione tra l'arte, praticata all'interno dei laboratori e molte delle competenze identificate dall'Organizzazione Mondiale della Sanità in collegamento alle life skills. Per meglio trasmettere l'idea delle ricadute dei laboratori espressivi sull'autostima e la partecipazione, vengono inoltre riportate alcune testimonianze di insegnanti e artisti intervistati dalla sottoscritta nell'ambito di una ricerca di dottorato mentre, per quanto riguarda la capacità di prendere spunto dalle

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opere d'arte per creare un legame con le storie personali dei fruitori, si fa riferimento all'esperienza di collaborazione tra il progetto Civico Zero di Save the Children rivolto ai MSNA e il Dipartimento Educazione del MAXXI.

Parole chiave: arte; intercultura; apprendimento; neuroscienze.

The Inextricable Link Between Art and Emotions

Art is an ideal medium for working with children and foreign students, especially those who do not speak the same language. Art also plays an important role in the expression of feelings and emotions. As stated by Martha Nussbaum, emotions, which guide our interpersonal relations, are the center of both individual and social life and it is, therefore, fundamental that our education teaches us both to recognize and understand our emotions so that we can better manage them (Nussbaum, 2009). Art channels our emotions. Those who have experienced past trauma are able to express their stories through art because art enables us to objectify our experiences, therefore enabling us to distance ourselves from them¹ (Ferrari, 2014). For example of this phenomenon among adults and children it's enough looking to the work of an organization such as Save the Children, which often operates in conflict zones, where it addresses the social and emotional gaps caused by childhood trauma, through the use of techniques such as the *Heart* method, a practice rooted in the use of art and play.² This method involves a psycho-social support program that uses the potential of artistic expression of children suffering from psychological disorders to help them process and overcome their traumas through artistic activities.

Examples from Educational and Informal Environments

Artistic workshops, when carried out in schools, can help students express their emotions. For example, in the classroom of one primary school which participated in the «Mus-e Roma» visual arts workshop project,³ a collage activity helped a shy, isolated student to both become aware of and express her desire to bond with her peers. Following the instructions to use only two images in her collage, the student chose images of a house and a ruin. Her choice of images provides a glimpse into the mind of a student whose most ardent desire was to have friends whom she could invite over to

¹ Stefano Ferrari asserts that «art functions primarily as a way of working through grief», cfr. Ferrari, 2014. Translation by author from the original Italian version.

² This methodology was created by Save the Children and first applied in Bosnia Erzegovina's primary schools. Through artistic languages, it manages to activate an autonomous healing and stimulus process, which has the effect of increasing participation to all school activities and improving peer interactions.

³ Villa D. in Audino, 2016.

her house. The ruins, on the other hand, represented the difficulties she was facing and the distressing reality of her home life. According to her teachers, the awareness of this desire was an important first step towards changing her attitude.

There is also evidence that art can give a voice to shared experiences and emotions, enabling people who have found themselves in similar circumstances to recognize, express, and process their own experiences and emotions. This is exactly what happened to a young foreigner who attended South African photographer Pieter Hugo's exhibition at Rome's MAXXI museum.⁴ The photographs depict a landfill near Accra (Ghana) where children work to extract precious metals used in computers and TVs. At the exhibition opening, the photographer recounted how, years later, when he returned to the site of his photographs, he discovered that some of the children he had photographed had died after coming into contact with the poisonous chemicals present in the metals. One of the students in attendance was particularly moved because, according to a cultural mediator in attendance, prior to arriving in Italy, he too had worked in a similar landfill in Patraso, Greece. A similar example is illustrated by the story of Morteza Khaleghi, a young Afghan movie enthusiast, who used cellphone photos of his fellow countrymen captured during their migration from Afghanistan to Italy to create a short film entitled *La polvere di Kabul*. Thanks to this video, Morteza won a special prize and a new video camera, enabling him to become a bonafide director.⁵ Art not only permits those who create works of art to become more self-aware and to overcome their own past traumas and bad experiences but, in the same way, an artwork can also have a positive, meaningful effect on its audience.

Art: a Medium which Encourages Participation and Increases Self-Esteem

By their very nature, artistic workshops provide a space in which one can experiment, challenge, and evaluate oneself, making them an ideal training ground for intercultural education. Children are often drawn to artistic activities because they tend to be less structured and more free form compared to traditional options. Freedom, in this sense, refers to the use of space and the choice of content. The choice of method depends on the adult educator who plans and oversees activities, taking into account students' needs and knowledge levels. Motivation can be taught through fun activities which promote the learning of social skills without creating performance anxiety. Theories of motivation highlight the important role that the fear of failure plays in the learning process as our previous experiences affect our confidence in our own ability to

⁴ This project was regularly attended by minors, especially foreigners, who participated in the Civico Zero project and visited the MAXXI during the weekend: the educational objective was to provide them the opportunity to tell their stories, from their experience leaving their country of origin to their expectations for life in their new country.

⁵ These stories were told by Yves Legal, the head of the day care center which participated in Civico Zero (a program run by Save the Children for the benefit of MSNA and minors in difficult circumstances, in Rome).

learn new concepts (Bruner, 2012; Montessori, 2009; Vygotskij, 1987). Conversely, artistic workshops draw on the emotional and experiential baggage of each person, enabling everyone to participate and achieve good results. Artistic workshops often have a positive impact on self-esteem, especially in the case of foreign students and those with learning disabilities. Vocal exercises taught in theater courses can greatly benefit timid and insecure students, as exemplified by the following story, recounted by the teacher of a student whose learning disabilities often led him to participate very little in traditional education settings:

Arturo, for example, who has learning disabilities and dysgraphia, struggled in some subjects because, as we all know, schools require reading and writing and when a student struggles in this area, it is hard for both the child and the family to accept this. During the theater course which culminated in a final performance in the auditorium, Arturo had a speaking role in which he was the protagonist; his performance elicited such applause that it brought his mother to tears and deeply moved us teachers.⁶

The ability to express oneself effectively in non-academic environments not only increases the pride and self-confidence of the performers but it can also benefit one's companions.

During a slow-motion workshop,⁷ the skills of two children, both in organization and abstraction, became clear when they successfully created a computer animation. In this activity, the students had to create a movement, these students created a stain which bounced dexterously into a pool of water, splashing, etc. It was not at all easy. Both the students and I were quite surprised.⁸

Sensory Experiences and Knowledge-Based Movement

Art is not only a symbolic expression of the human experience; it is also a space for reprocessing past experiences and acquiring knowledge.

Children are able to develop these skills only when they are grounded in comprehensive, hands on experiences; in fact, the experiential aspect is a fundamental characteristic of artistic workshops because art, as Umberto Eco reminds us, is «always connected to a “doing”» which, through the use of artistic materials transforms the artist's intention into a physical event (Eco, 2003).

Artistic workshops facilitate the processes of learning because they use:

- the five senses;
- the body frame;

⁶ Testimony from a teacher whose class participated in the project «Mus-e Roma», a.s. 2014/2015. Translation by author from the original Italian version.

⁷ Slow motion workshop carried out during the «Mus-e Roma» project, a.s. 2014/2015.

⁸ These are the words of Vincenzo, an instructor from the class which participated in the previously cited workshop. Translation by author from the original Italian version.

- movement;

i.e., the starting points for the acquisition of knowledge, regardless of one's culture.

Artistic workshops require a level of physical engagement that sets them apart from other kinds of workshops. In these workshops, participants use all of their senses, becoming fully involved. Movement and the use of the senses is instrumental to understanding and applying concepts. Rudolf Arnheim in his work *Art and Visual Perception* writes that: «The mental life of children is intimately bound up with their sensory experience. To the young mind, things are what they look like, sound like, move like, or smell like» (Arnheim, 2005, p. 165). Decades earlier, Maria Montessori emphasized the role of perceptual systems and direct experience in learning: the greater the capacity to discern and reprocess perceptive stimuli, the richer and more solid the base for the development of intelligence.⁹ These findings have been confirmed by recent neurophysiological studies where it has been discovered that the neurological connections formed during active learning are stronger and more enduring than those formed during passive learning. Moreover, techniques such as PET and FMRI¹⁰ have enabled us to explore the activities responsible for categorization, memory, and learning revealing the important role of perceptive and motor systems in the dynamics of signification. Edoardo Boncinelli, the famous Italian geneticist and neuroscientist, asserts that recreational and motor activities are in fact intelligent activities, useful for «higher level» learning and the development of psychological maturity (Boncinelli, 1999). Movement and muscular exercise induce physical experiences that can translate into concepts; these concepts can provide the key to confronting new problems and experiences.¹¹ Dance, for example, not only offers an alternative approach to learning and developing cross curricular competencies such as concentration, communication, and autonomy, it also teaches us how to use our energy, our strength, and our sense of direction.

The Jacques-Dalcroze approach¹² to music education bases its entire morphology of music on movement and the body; here, music inhabits both form and meaning, in a continual exchange between controlled movements and the perception of sounds. In accordance with the pedagogical theories which maintain the effectiveness of learning

⁹ Maria Montessori came to these conclusions based on her research and experience working with disabled children. Translation by author from the original Italian version.

¹⁰ PET: Positron Emission Tomography; FMRI: Functional Magnetic Resonance Imaging.

¹¹ This hypothesis seems to have influenced educational norms, as stated in the following excerpt from the DPR (decree of the President of the Italian Republic) from February 12th 1985, n. 104, Part Two, entitled, «Una scuola adeguata alle esigenze formative del fanciullo. La creatività come potenziale educativo»: «The reading and interpretation of non verbal, musical and motor language with which children are so accustomed can positively influence learning within more complex fields such as linguistics and logical-mathematical language».

¹² Émile Jaques-Dalcroze, who lived in Switzerland between the 19th and 20th centuries, created an innovative method of music education which focused on the use of the body.

through direct experience, intellectual comprehension of music comes from direct experience. The perception of music on a motor level leads naturally to one's comprehension of the cognitive aspects of music (rules, analysis, dictates) as well as its creative and social nature. For Jacques-Dalcroze, the point of rhythm was the promotion of the «whole musician», someone capable of both playing written music and creating and critically analyzing what he heard (Jacques-Dalcroze, 2008).

The Mind-Body Connection and the Virtuous Cycle of Experience and Proficiency

«The body is not only an instrument of “doing”, in the sense that it explores the world, accumulates knowledge, abilities, and personal resources, and the body is not the least noble part of the person, because its evolving form and its language are intelligent; they communicate feelings, emotions, and thoughts more effectively than other means of communication»¹³ (Sibilio, 2002, p. 34).

To foster learning, however, attention to the body and to movement must necessarily be combined with attention to mental processes: only through this combination is it possible to reconstruct the mind-body connection, making it possible to feel and to think. On the other hand, there is the danger that the motor component becomes an athletic activity in its own right and the mental aspects remain intellectual concepts, never becoming skills. Moreover, as previously mentioned, it is important to remember the role of emotions which neuroscience recognizes today as having a biomolecular base (Pert, 2016).

From their emergence up until the 1980's, the cognitive sciences were primarily concerned with the function and applicative aspects of the mind and their relationship to its performance. Beginning in the 1990's, the cognitive sciences became interested in the «embodied» mind. Francisco Varela was one of the leaders of this movement.¹⁴ Varela's emphasis on the importance of lived experience led to a change in the way of seeing the mind which enabled scientists to shift from the concept of the «neutral mind» to the concept of the «situated mind» (Varela, 2007). According to this new concept of the mind, thought does not have to adapt and/or confirm reality, but rather it discovers and confers sense; experience and knowledge reciprocally nurture each other. With regards to the relationship between art and the development of creative thought, it is worth mentioning the unknown functions of known objects proposed by Bruno Munari: «A glass used as a vase, a bottled used as a base for a lampshade, a jug with a lightbulb inside of it, used as a lighting fixture, a carriage lamp used as a wall lamp, a small model toilet used as an ashtray, a sombrero used as a decoration, hung on a wall, an antique wooden crib used as a magazine rack, an old wrought-iron safe used as a bar, a

¹³ Translation by the author from the original Italian version.

¹⁴ Chilean biologist and neuroscientist.

bar used as a battlefield, a bottle used as a bomb»¹⁵ (Munari, 1977, p. 83).

The search for original answers and unique meanings nurtures divergent thought and, therefore, creativity: reading and interpreting reality in a different way can lead to the discovery of a new way to experience and explore the world.

Empathy and the Universality of Art

When discussing the relationship between art and neuroscience, one cannot forget to mention the recent studies of mirror neurons which attempt to scientifically explain why art is able to elicit «universal» emotions to such an extent that it can empathetically relate to its viewers (Gallese e Freedberg, 2007). The neuroscientist V. Gallese hypothesized that mirror neurons play an essential role in the creation of empathetic relationships between individuals, suggesting a model of intelligence that is closely tied to interaction and learning through observation.

While learning through observation is not the only way to learn, it is an innate process which takes place without the subject's even being conscious of it and plays a particularly important role in early development. The arts nurture and extend our capacity for empathy. By the turn of the nineteenth century, empathy was believed to be the key to understanding the secrets of aesthetic and artistic expression. Experiencing the aesthetic was believed to lead to a process of empathic identification in which the artwork was no longer a mere thing but acquired an expressivity that resembled the human: no longer an object, but almost a subject (Dufrenne, 1969). Within this framework of understanding, empathy was understood as the use of an individual's spiritual and material nature for the purpose of interpersonal communication. This, of course, implies the existence of a neurobiological human predisposition toward intersubjectivity (Gallese e Stern, 2015) which has, in fact, been confirmed by neuroscientific research on mirror neurons which form the base of the human capacity to relate to others. Vittorio Gallese,¹⁶ in a speech titled *Il teatro come metafora del mondo e il teatro della mente*,¹⁷ explains his theory according to which «the body of the actor is capable of inducing emotional responses to the extent to which he is able to cause a series of sensory-motor and emotional resonances, which are an important part of the interactive processes of artistic expression. Watching someone carry out a given action activates not only the visual part of the brain, but also the motor part which would activate if the observer himself were the actor. Therefore, the act of seeing is much more complicated than the simple activation of the “visual parts” of our brain; it is a multimodal undertaking which calls into play not only the visual brain but also the

¹⁵ Translation by author from the original Italian version.

¹⁶ Vittorio Gallese, a scientist on the team responsible for the discovery of mirror neurons, became interested in the relationship between mirror neurons and the arts, from dance to painting and from theater to film.

¹⁷ «The theater as a metaphor of the world and the theater of the mind».

motor and tactile brain, as well as the brain that maps our emotions and affectivity».¹⁸ In this sense, the theatrical process can be reduced to a universalism which transcends cultural differences without overlooking them. And it is for this very reason that theater proves itself as an effective tool for social integration in intercultural education.

The increase in the volume and the diffusion of studies in neurology, psychology, philosophy, and pedagogy which establish an inseparable link between the mind and body and emphasize the importance of physical experience and movement on the learning process provide hope for an increase in the use of nonverbal languages in school curricula.

From Art Class to the Art of Education

Beyond the results of neuroscientific studies, the incredible educational potential shown by all of the arts explored at the workshop level is undoubtedly due to a shift in focus, from a focus on the artistic «product» to the «process». In the former case, the objective is the acquisition of specific technical aspects of various art forms and a special emphasis is placed on the final public reception of the work of art. The chosen sites for final performances and concerts are often prestigious locations and the best performers are given prominent roles. In the latter case, more attention is paid to the process, to the methods and various languages employed during the workshops. Here, the objective is to attract and involve the greatest possible number of people in the artistic experience and to involve those who are not normally drawn to these environments. The chosen exhibition spaces are not stages or famous locations but rather they are public, easily accessible places such as squares, courtyards, and other public spaces (Aróstegui e Wolfgang Espigares, 2016).

The cross-curricular educational skills which can be developed through artistic workshops are:

- the capacity to look more carefully;
- the capacity to listen more deeply;
- the ability to organize suitable environments and gather necessary materials.

Moreover, artistic workshops:

- leave participants free to decide what they create;
- instill the sense of wonder that comes from the creative process;
- help participants to discover the extraordinary possibilities latent in ordinary gestures and materials.

¹⁸ <http://www.ugomorelli.eu/pp/Gallese-Morelli-Teatro-metafora-mondo.pdf> (last access: 28th october 2019). Translation by author from the original Italian version.

The perception and the use of experimental space in the visual arts, the capacity to dance harmonically and in sync with others, and the use of the voice both for singing and in theater, together form the necessary prerequisites for the acquisition of basic educational skills (Della Puppa e Vettorel, 2007).

The acquisition of skills through the various artistic languages can irreversibly transform people: if one learns to listen to an actor, allowing themselves to be captured by their voice and words, one also learns how to listen to words and voices of others; if one learns to move according to a given rhythm or to take up space in given way, one is able to apply the concept of space and its subdivision to a wide range of disciplines.

Dance

Moving on to the specifics of individual art forms, dance is a way to address the integral emotions to childhood development. Dance can transform an outsider into a work of art (Bonjour, 2012).

Dance, within its apparent simplicity, is an art form in which the body is the dancer's instrument, space is the canvas on which the artist paints and time is regulated by the dancer's movements. Here, body, intellect and emotions interact to create choreography.

Dance can be used as an educational tool as dance enables a dancer to become conscious of their own body and its capacities for expression. In a school setting, dance can take on a social function; dancers learn to respect both their own work and the work of others as well as how to move harmonically and consciously in a shared space. Dance cultivates an openness to the human condition, teaching us to look with curiosity at our culture and, like art, dance is meant to be shared with an audience. Everything begins with the lived experiences of the child/student; the teacher guides the student in the discovery and development of his capacity to tune in and listen to his surroundings from both a cultural and spatial point of view. Beyond simply nourishing the process of artistic creativity, the objective is to stimulate bodily creativity and to establish a dancer-spectator relationship which is activated through the creation of a shared code.

There are four possible stages of research in dance:

- exploration through improvisation;
- awareness;
- choreographic composition;
- the presentation of the choreographic composition to the public.

Art creates a safe, symbolic space within which violence is contained and cannot take its own course. According to the choreographer Marcelle Bonjour,¹⁹ the foundation

¹⁹ Marcelle Bonjour is the creator of «Dance au coeur», a project which enjoyed much success in French

of artistic intervention is the idea that energy, even violent energy, can be used positively.

Regaining contact with the body helps students to overcome difficulties, both in the educational context and beyond. This is well illustrated by the story of a student on the autism spectrum who participated in an elementary school dance workshop; this student rarely participated in class and refused to participate in the dance workshop. As if this weren't enough, the student often had violent outbursts which made it even more difficult for him to integrate himself in the classroom. One day, the dance instructor who, until this point, had always left the boy alone in the hope that he might one day spontaneously decide to participate, decided to try a new approach: first she tried simply greeting him and to establish contact with him, giving him a pat on the shoulder or asking him a question; when this received positive results, she decided, without asking, to engage him in a two person game of somersaults across the floor which the boy enjoyed immensely. The student's teacher noted that she had never seen him laugh out loud in such a way before, which encouraged the dance instructor to engage the student in other activities. Evidently, contact through child's play was just the right strategy for this student.²⁰

Theater

Moving on to another method of artistic expression, theater meets education in the moment in which individual growth is integrated into a collective approach. It could be said that the essence of theater is the creation of a space in which one can encounter the other (Grotowski, 1970). The development of capacities such as imagination, improvisation, and creativity facilitate the discovery and the management of one's internal world. In theater workshops, the physical, creative, and group aspects come together. Additionally, when, in a theatrical context, we are placed in situations which are qualitatively different from those we encounter on a daily basis, our life experiences are expanded; our theatrical experiences can change our definitions of ourselves, of others, and of the world in general (Oliva, 2015). Through storytelling, contrasting emotions and differing opinions can be safely explored as actors confront people who are different from themselves, making theater an ideal place for foreigners, be they adults, teens, or children, to come together. Some methodologies have been proven to be particularly effective. Among these:

- Autobiographical theater can help one overcome past trauma because, in theater, emotions are explored through an indirect, shared narrative: the reenactment of the past and the simultaneous awareness of the present moment help us envisage the future;

schools.

²⁰ Lobefero S. in Audino, 2016.

- Playback Theater is a theatrical method which provides a platform for the «un-official» stories of those who have suffered and whose voices are not usually heard.

Theater is also an effective tool for second language learners:

- it doesn't develop only oral expression, it can help improve ones reading and writing and, by isolating given linguistic structures within a text, it lends itself to metalinguistic reflection;
- when we identify with the plot and the characters, the physical and language-based actions are tied to contexts; in this way, they acquire a real value which makes it easier for students/actors to retain them;
- assuming another identity gives students the opportunity to express themselves with greater ease and spontaneity, while reducing their fear of failure or being teased;
- through interaction with others, the children/teens are forced to make linguistic efforts which teach and/or reinforce the rules governing social relationships (Magnani, 2002).

The Visual Arts

From the planning, to the collection of materials, to the experimentation and the decision making, the process of making a work of visual art teaches skills which can be used in a variety of contexts, including in the classroom. The simple sharing of materials and tools is one way to develop collaborative and social skills. This social aspect is common to all the artistic workshops from the moment that the peer to peer interaction replaces the student to teacher relationship, encouraging the development of communication skills and, specifically, the ability to relate to others. Working with children, using different materials and different approaches, can prove to be very beneficial because, while a given approach may not work in one context, it might work in another. It is also recommended to avoid sticking to only one approach, this way you provide children the opportunity to understand what approach works best for them. Moreover, through experimentation, both individual as well as collective, and through the use of metaphor,²¹ when working with both children and adults, it is possible to encourage one's students to seek out the truth, to discover different models, to stray from the norm, and, in so doing, cultivate creative thinking.²²

²¹ «Metaphor», according to Munari, more than being simply a rhetorical or stylistic device, plays a significant role in the process of acquiring and constructing knowledge (Fonzi e Negro Sancipriano, 1975).

²² We're here specifically referring to J.P. Guilford's divergent thinking. Guilford believed that divergent thought was the ability to produce a range of possible solutions to a given problem, especially the one you

Music

Learning is most effective when it is connected to sensations, emotions, and individual stories and especially when a variety of outside stimuli are introduced into the learning process. In the case of music, for example, knowledge is best retained when:

- attention is paid to the characteristics of both the instruments and the songs;
- the listener recognizes the value of the emotions and feelings of music;
- the participants are invited to create songs, dances, and musical compositions;
- the creation of songs is encouraged.

The conventional scoring system used in music makes it easy for one to explore, write, or read music on their own, but in order to bring children closer to music, it is necessary to help them discover that music is a part of life. Rhythm is not a complicated concept: even the phases of a child's day contain rhythms that can be translated into music. Once it takes on a more structured form, something of the initial, abstract music still remains. Through physical experiences and games, children fall in love with music and realize that music is not so abstract, nor is it something which can only be taught on a whiteboard.

Non Verbal Language and Communication

Communication is the base of social relationships. Qualitative research in the field of communication has shown that non verbal language (38% spoken, 55% gesture) has a greater effect on communication than verbal language does (7%) (Nanetti, 2017)²³.

Through our words we communicate to others what we know; while, with our body, we communicate who we are and how we feel: the person is quiet while the body continues to speak.²⁴ (Nanetti, 2017, p. 48)

While spoken language has a denotative function because it describes objects, facts, and situations; non verbal language has a connotative function, as it communicates ideas and sentiments. Educational theory, alongside cognitive processes, must account for the emotional processes which are stimulated by activities focused on body language, as acknowledged by the American psychiatrist Daniel Siegel, «[human] relationships and

can provide more than one correct answer. A similar ability probably has a role in the creative act, because the artist often has the necessity to explore a series of possible ways before deciding on the one he or she thinks is best.

²³ Nanetti refers to Francois Sulger. Nanetti F., *I segreti del corpo*, Roma, Armando, 2017, p.45.

²⁴ Translation by author from the original Italian version.

neural linkages together shape the mind» (Siegel, 2001, p. 3).

Moreover, Ekwall and Shaker have shown that, in the learning process, it is more likely that one retains information obtained through multiple sensory channels than information is learned through either reading, listening, or seeing alone.²⁵ These findings are confirmed in the arts where it has been shown that bringing together different artistic languages enhances the learning of the individual art forms.

School Guidelines and Workshop-Based Curricula

As it has been clearly shown, all artistic languages serve a preliminary and functional role for school curricula and encouraging personal growth and development within a group context.

The skills which play a crucial role in the artistic process are the same competencies recognized by the European Parliament as the very skills which young people ought to acquire by the time they have completed compulsory schooling. Such skills develop cognitive tools and metacognitive attitudes which enable students to benefit from the opportunities available in our society while, at the same time, encouraging them to play an active role regardless of the realities of globalization. These skills develop one's abilities to think critically, take initiative, be creative, manage one's emotions, take risks, and make decisions. These interdependent skills create a foundation for future learning, thus preparing students for adulthood.

The key competencies associated with the values of citizenship to be acquired by the end of compulsory schooling are (DM, n. 139/2007):

- Learn how to learn
- Plan
- Communicate
- Collaborate and participate
- Act autonomously and responsibly
- Problem solving
- Identify connections and relationships
- Collect and interpret data.

Artistic workshops also contribute to the development of the skills enumerated in «Indicazioni per il curricolo per la scuola dell'infanzia e per il primo ciclo dell'istruzione» (2007):

²⁵ Ekwall and Shaker in Della Puppa F. e Vettorel P. (2007), *Stili di apprendimento e culture in classe*, Laboratorio ITALS – Dipartimento di Scienze del Linguaggio, Università Ca' Foscari, Venezia, <https://docplayer.it/7578836-Stili-di-apprendimento-e-culture-in-classe-di-francesca-della-puppa-e-paola-vettorel.html> (last access: 28th october 2019).

- learn how to reflect on previous experiences through exploration, observation, and confrontation;
- describe one's own experiences and share them with others through personal narratives: recalling, narrating and representing significant details;
- develop the habit of asking questions, reflecting, and processing meaning.

In «Indicazioni per il curricolo per la scuola dell'infanzia e per il primo ciclo dell'istruzione», it is also stated that: «The Primary School is conscious that the symbolic dimensions which govern both the familial and social relationships of children are inseparable from a child's corporality» (p.3).²⁶ The planning of artistic workshops requires appropriate spaces and, at the same time, flexibility in planning and designing curricula. Fortunately, academic independence²⁷ allows for such flexibility in time and space availability which, together with teacher training, facilitates workshop-based curricula unlike more obsolete, less effective traditional teaching methods. The existence of related regulatory schemes is essential but these supports are only effective in so far as the teachers and the administrators recognize the benefits of these workshops in terms of social and learning skills. Workshop-based curricula ought to be recognized as essential to contemporary pedagogy because these curricula shift the focus from passive teaching to active learning, as stated in the 2007 guidelines (DM, n. 139, «Regolamento recante norme in materia di adempimento dell'obbligo di istruzione», p. 6):²⁸ «The child must be at the center of every educational decision. The primary objective is his/her development in terms of autonomy and responsibility for the purpose of exercising active citizenship».²⁹

Conclusion

Artistic and educational action can merge collaboratively. When teachers and artists work together to create a climate of trust, this environment fosters active listening, acceptance of others, flexibility, and adaptability. From a purely multicultural point of view, if artistic workshops can manage to shift the focus from content to people and acknowledge all forms of intelligence, they can generate surprising results in terms of integration and education. As schools are becoming more and more multicultural, art, a language which is universally accessible and makes no distinction among people of different backgrounds, offers anyone the opportunity to express themselves. Within this

²⁶ Translation by author from the original Italian version.

²⁷ Cfr. c. 1, 2, 3, 8, 9 in art. 21, L. 59/1997, «Delega al Governo per il conferimento di funzioni e compiti alle regioni ed enti locali, per la riforma della Pubblica Amministrazione e per la semplificazione amministrativa», <http://www.edscuola.it/archivio/norme/leggi/art21.html> (last access: 28 ottobre 2019).

²⁸ DM, 139/2007, «Regolamento recante norme in materia di adempimento dell'obbligo di istruzione», Archivio della Pubblica Istruzione, p. 6, https://archivio.pubblica.istruzione.it/normativa/2007/dm139_07.shtml (last access: 28 ottobre 2019).

²⁹ Translation by the author from the original Italian version.

approach, art reframes learning as a constructivist concept; learning thus becomes an intersubjective process in which all components interact (D'Angelo e Di Rago, 2009). Through the creative process we can achieve self awareness by working to understand our emotions and identity; as a result, we inevitably recognize and acknowledge the diversity of others because only through self awareness we are able to overcome our fear and mistrust of others (Buber, 1993). Artistic creation leads to an understanding of culture which is neither stereotypical nor folkloristic because it is grounded in emotions and personal stories which are, by their very nature, diverse. Moreover, one comes to understand that the nature of identity is in a constant state of change and transformation because each individual is the sum of diverse identities which overlap and intersect one another. On one hand, you can meet different cultural identities in the same person (you can practice yoga, eat at McDonald's and adore heavy metal music), on the other, cultural identity changes throughout life, depending on the people and places we meet.³⁰

Lastly, at a time in which the excessive use of mobile phones and new technologies sometimes makes youths forget about the existence of their body and about relationships based on physical contact, giving more space, but especially more importance, to art-centered, workshop-based teaching methods, could help them develop a more integrated dimension of the human being.

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³⁰ See Maalouf, 1999; Said, 2008; Santerini, 2001; 2015; Todorov, 2009 on the subject of multiple identities.

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